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The BRAC

non-formal primary education
programme in Bangladesh

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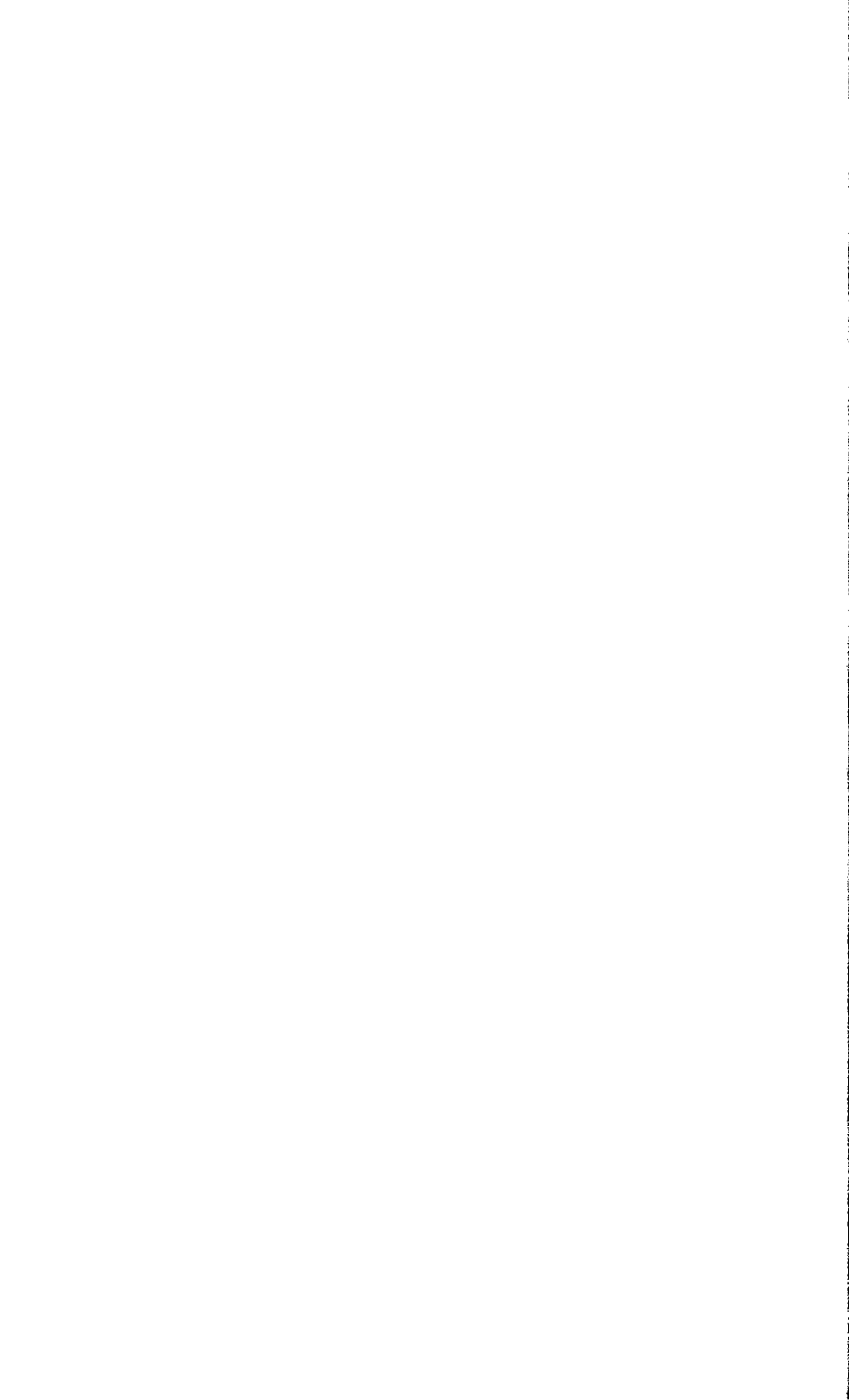
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The BRAC non-formal primary education programme in Bangladesh

The Bangladesh Rural Advancement Committee (BRAC) is the largest non-governmental organization in Bangladesh. In 1985, in response to requests from rural poor people, it initiated a primary education programme with experimental schools in 22 villages. By late 1989 the programme had expanded to 2,500 schools, and another 2,000 schools will open by 1991. The objective of the programme at its inception was to develop a replicable primary education model which could provide, in a three-year period, basic literacy and numeracy to the poorest rural children who as yet had remained unreached by the formal school system.

Experience with the programme has proven that para-professional teachers, carefully but quickly trained and paid a small stipend, can be effective and that extensive parent and community involvement is important for success. The programme has shown that young village women and men can become dedicated and responsible teachers if they are well selected and receive good basic training and continuing refresher training courses, effective and consistent supervision, and structured guidance on what the children should learn and how.



The challenge

The challenge to the programme designers was to develop an innovative and relevant curriculum, to design, test and produce materials to meet the identified needs and interests of rural children, to develop teaching techniques which could be implemented by a cadre of para-professional teachers recruited from the community, and to experiment with different modalities of community participation to assist and strengthen primary schools.

Bangladesh ranks 107th in literacy among 131 countries, with a rate of 33% for those 15 years and older¹, and 85% of rural women cannot read or write or understand numbers at a functional level². Although 80% of the population lives in rural areas, 70% of the education investment goes to urban areas, most to higher education. Bangladesh spends 2.2% of its GNP on education³, compared with the regional average of 4.4%⁴. In its most recent five-year plan, Bangladesh stated a goal of reaching 70% of its primary school-age children with education by the year 1990. Budget appropriations, however, make the implementation of this goal unlikely.

Recent studies show that 44% of primary school-age students do not enroll in government primary schools⁵. Of those who do enroll, 48% leave school before completing the third grade and 62% before completing the fifth grade⁶. Non-enrollment and drop-out rates for girls are even higher. The reasons appear to be unmotivated or absent teachers, large classes (on average 59 students to one teacher in the primary grades)⁷, irrelevant curricula, lack of books and other materials, unequal treatment of poor children, fear of failure and unauthorized fees.

The BRAC schools have experienced a drop-out rate of 1.5%⁸ for the full three-year programme (loss is primarily because families must move away), and daily attendance surpasses 95%. Statistics show that 95% of those who have finished the three-year programme have passed examinations allowing them to enter the fourth grade in the formal system.

The enrollment of these students in the government schools was a totally unanticipated development, and an especially significant one because these children are from the poorest families and more than 65% are girls. In the past, observers of primary education throughout the developing world have said that the poorest children and girls did not go to school because their parents needed them to help in the field or for other work or in the home, or because the parents did not value education. The BRAC experience suggests that there are variables more important than poverty that influence parents' and children's decisions about school enrollment and attendance. Relevant curricula, dedicated and well-supervised teachers, reasonable class size, parent involvement, accessibility of schools to home and low cost are apparently significant variables.

The BRAC schools

The target of the BRAC schools is the "unreachable"--those children that research has shown have been deprived of access to education because of poverty and gender. The schools all lie in rural villages and the children selected for admission belong to families of the poorest of the landless. In Bangladesh nearly 70% of rural families are landless, and almost no wage employment exists except for part-time work on farms.

The goal of the schools is to enroll 70% girls, and to date girls make up 69.85% of enrollment. Girls are a special focus since women are responsible for the care of children, for the health of their families, for nutrition and hygiene. Furthermore, research indicates that women with even a small amount of education are more receptive to new ideas, to family planning, to nutrition teaching, to improvements in hygiene

and sanitation, to understanding about immunization and diarrhoea control. Education also brings a sense of self-worth and fosters respect from others.

The criteria for selecting villages where schools will be located include parent demand, availability of teacher candidates and proximity to a cluster of other villages that meet the first two criteria. For management, supervision and continuing teacher training, clustering of the schools is essential.

BRAC has been implementing two primary school models directed to two different age groups. The first, called Non-Formal Primary Education (NFPE), is a three-year programme for children 8 to 10 years old who have never enrolled in school, or who have dropped out during the first year. One teacher takes the children through all three grades. Classes meet for two and a half hours each day for the first and second grades and three hours for the third.

The second model is an experiment, started in 1988, with a two-year programme for children 11 to 14 years old who have never attended school. This programme, called Primary Education for Older Children (PEOC), now has 920 experimental schools. Nearly 75% of the students are girls. Those already married are not accepted into the programme because cultural norms in Bangladesh proscribe the mobility of young married girls.

The NFPE curriculum has been adapted for the PEOC and condensed. The older children have learned much faster than anticipated. The curriculum designers originally expected that the 11- to 14-year-old children could learn in two years what the younger children learn in three. Instead, the older students have taken only one and a half years to cover the material, and a new, fourth phase of the curriculum had to be quickly developed to keep up with them. The curriculum has to be more functionally oriented, particularly in the second year, because many of these students are too old to transfer to the government schools, even if they are not required to work full time to help their families. The low drop-out and high attendance rates are similar to those achieved by the younger children. The most recent data available indicates that over 40% of the children, the youngest and mostly girls, want to transfer to the fourth grade.

In both types of schools, the particular time that classes are held in each village is decided in meetings with parents. Classes are conducted six days a week for an average of 268 days each year. Government schools are scheduled for only 220 days a year. BRAC's educational specialists believe that long vacations interrupt and reduce learning. The most convenient timing for the short vacation periods is decided between the teachers and the parents to suit seasonal work or religious needs.

The student-teacher ratio is kept strictly at 30 students to one teacher no matter how strong the demand. If the demand is great, a second school can be started in the same village, provided that a teacher can be found. There is usually a waiting list of potential teachers.

Each school requires a minimum of 240 square feet (22.30 square meters) of space. The facility is rented at minimal cost from some group or individual in the community. Often a landless group will construct the school and make it available to the programme for a very low rent but sufficient to pay for initial materials and repairs. At present, all of the schools are typical village structures with woven bamboo or mud walls, thatch or tin roofs and earthen floors. The schools do not have their own latrines or tubewells, so they must be located near these necessities.

Children sit on woven mats on the floor. The teacher has a stool and a trunk in which materials are kept and which also serves as a table. Each school has a blackboard and charts, and each student is given a slate, pencils, notebooks, and textbooks. Children usually sit in a "U" shape but can move around as they help one another, go to the blackboard, or to the teacher's stool.

Children are expected to learn their lessons in the classroom. Only small amounts of homework which can be done independently are assigned. Since nearly all parents are illiterate, students can get little or no help with their assignments at home. This attitude toward homework is very different from the government schools, where teachers assume that much of the learning will take place outside the classroom and large amounts of homework are assigned as a matter of

course. The more affluent parents of children attending government schools may hire tutors to ensure that their children cover all required material and can pass the examinations. Often the same teachers who teach the students in school serve as tutors.



Pedagogical strategy

Teachers

The BRAC school teachers are chosen from among the more educated in a village. A person selected to be trained as a BRAC teacher must have completed nine or more years of school and must be married. Preference is given to women who at present make up about 75% of the teachers. This is in contrast to the government schools where 86% of the primary teachers are men. One criterion for choosing a village where a school will be opened is whether an acceptable person to be trained as a teacher can be found.

Teacher selection is made through an interview process conducted by the programme's field managers, which takes place at a location near the village. The applicant is asked to read a newspaper aloud, write on a blackboard, write an address on an envelope, converse with the interviewing committee and perform other similar exercises. Good basic literacy and numeracy, strong common sense, presence, ability to articulate, and interest in children are the attributes desired. Those selected receive 12 days of training in one of BRAC's five residential training centers or in area offices. A few of the recruits (less than 5%) may be dropped at the end of the training if they don't measure up. During the first three months of teaching, the teacher's performance is especially closely observed; a few teachers have been replaced during this probationary period.

Teachers are paid a very small monthly stipend, currently 350 Taka per month (about US\$10) the first year, 375 Taka the second year, and 400 Taka the third year. (The average annual income in Bangladesh

is under US\$200 per capita.) This stipend may be compared to the monthly salaries of the government teachers, which average about Tk 1,200 per month (including benefits such as rent and medical allowances and pension) for longer daily hours but a shorter school year. The average monthly income of the families of the BRAC students is about Tk 600 (about US\$17).

The BRAC teachers are under contract; they are not tenured. Teaching is not a sinecure for life to be held regardless of performance. The school setting is highly structured and closely supervised by BRAC's Programme Organizers and by the parents.

If a BRAC teacher is very well qualified and has had at least a year of experience, and if a second class is required in the same village or one nearby, the teacher can take on a second class with commensurate pay. There is almost no paid work available for women in the villages and employment as a teacher gives women a small, regular, year-round income and respected status. This is an additional, important outcome of the programme. Most of the women teachers are between 20 and 30 years old and many have children of their own. There is some evidence that the women teachers are more receptive to family planning. Only about 2% of the teachers have become pregnant since the schools have started. Those who do have babies take a short leave without pay. The male teachers are a bit older than the female teachers; their ages range between 25 and 35.

There is very little absenteeism among the teachers. Each teacher is allowed 10 days of leave per year in addition to the holidays. Unauthorized absences result in a loss of Tk 10 per day. If a teacher is absent classes are not stopped. When a teacher is sick she tells the school committee and one of the committee members or another parent sits with the class. Sometimes the brighter third-year students assist the others in review and exercises.

The teacher drop-out rate is less than 2%. Usually teachers resign only if their husbands must move away. In villages with BRAC schools, BRAC maintains a waiting list of those who wish to become teachers. A replacement teacher can soon be made available if a teacher must move away or quit for some other reason.

Teacher training

The teacher training methods now in use were developed through trial and error. The first training materials and methods tried were far too sophisticated and did not accomplish their purpose. Training approaches, methods and materials were changed several times until effective ones were developed. Training manuals evolved from this process are now in use. The teacher-trainers are trained by education specialists working together with training specialists of BRAC's Training and Resource Centers (TARC).

The initial 12 days of teacher training are held in residential centers and emphasize basic concepts of learning theory and practice teaching. Five days are spent on concepts, seven days on role-playing as teachers and learning how to prepare lesson plans.

Teachers are trained in groups of 20 to 25. The training is learner-centered and participatory, but structured. It is designed to allow the teachers to experience the kind of learning that they will be facilitating in the classroom.

Trainees are introduced to teaching materials that they will be using: books, workbooks, accompanying teaching notes, and teaching aids such as charts, picture cards, and counting sticks. They are taught to utilize peer assistance methods: for example, assigning stronger students to help the weaker and how to place them to render peer assistance effective. They are taught never to punish a child but to use other methods of discipline. Comprehension rather than memorization is stressed. Teachers are taught the importance of class routines and they are given a general structure that must be followed, although individual teachers may vary the timing.

All teachers attend continuing teacher training sessions one day each month. Teachers from about 20 neighboring villages meet together with their supervising Programme Organizer to discuss problems and to work on teaching-learning issues. The monthly teacher training days, which are run by the field supervisors, focus on experiences in the classroom and problems encountered. Teachers of each grade have different refresher days, i.e., first-grade teachers together, second-

grade teachers together, and so on. Discussions center around identified general problems and the difficulties of the weaker teachers. The more experienced and better teachers participate in the discussions and help the weaker teachers. Sometimes, in addition to the monthly training days, an experienced teacher from one village will visit a teacher in a neighboring village to assist with problems.

All teachers attend a six-day refresher training course at the beginning of the second year. This refresher training course concentrates on deepening the teacher's understanding of learning concepts and on improvements in teaching methods.

How can a majority of the teachers function successfully with so little initial training? The monthly experience-based training days and the yearly refresher training courses are important in supplementing the initial training. But probably most important in helping the teachers to perform effectively is the very structured curriculum and the use of daily lesson plans, and the nature of the learning materials which have been prepared in simple modular form, with teaching notes. Also, a strong supervision system is in place (about one supervisor for 15 teachers) so that each teacher's performance is closely supervised and ways are found to help when there are problems.

Curriculum and teaching materials

The curriculum for the schools was initially developed with the part-time assistance of educational specialists from Dhaka University. BRAC developed a small core staff of its own education specialists who worked with the university specialists. The team spent more than two years on planning, developing and testing the curriculum and materials.

The initial step in curriculum development was to gather information about the targeted learners, their families, economic conditions, perceptions, levels of cognitive development, psychological and physiological growth. The formal schools in the rural areas, their curriculum, their relation to the community and the reasons they were succeeding or not were carefully studied.

After this basic research, the learning objectives for the BRAC non-formal schools were formulated, in terms of both concepts and skills. The curriculum subjects and the activities required to achieve the objectives were then decided. Instructional materials were developed and tested extensively in the first 22 experimental village schools. Finally, when books and other materials were deemed satisfactory, mass production by BRAC's printing press could begin to meet the rapid expansion of the schools.

The overarching objectives of the curriculum are to help the children to achieve basic literacy, numeracy and social awareness. The curriculum is divided into three subject areas: Bangla (the Bangladesh language), mathematics and social studies. The latter emphasizes health, including nutrition, hygiene, sanitation, safety and first aid, eco-systems, community, country, the world, and very basic science. (The full curriculum is attached in the Appendix.)

An important part of each day (40 minutes) is spent on co-curricular activities designed to develop the child more fully. These activities include physical exercise, singing, dancing, drawing, crafts and games, as well as storybook reading. The students love these activities, a factor which helps to assure high attendance.

The first eight weeks of the first grade is a preparatory or pre-primary phase with structured modules designed to develop the child's learning readiness and the ability to cope with school. During this phase the student learns many things such as colors, fine motor coordination to prepare for writing, shapes, rhyming, and pre-reading, writing and numeracy. Each student learns 36 words through the look-say method, learns to count, and so on.

After the introductory eight weeks a structured class routine continues. The two-and-a-half-hour day is divided into 30 minutes of reading with structured reading exercises, 20 minutes of writing including handwriting, spelling, making words and dictation, 35 minutes of mathematics, 25 minutes of social studies, and 40 minutes of co-curricular activities. Each day of the week is expected to include certain pre-set activities and a one-page suggested class routine is utilized. As the teacher gains experience, the pace and emphasis can be varied to meet the needs of the particular group of children.

Each teacher prepares a daily lesson plan, which must be based on the guidelines provided by the programme. The books for each class provide the framework for the lesson plan and become the principal learning guides for the students.

Every year students are provided with vernacular and mathematics books and in the second and third years, English and social studies books are added. In the first year the students are not given a social studies book. Social studies are taught through discussion, based on a special teacher's manual. In the first two years of the programme no English was taught, but in 1986 English was introduced in the latter part of the second year so that the children who wish to go on to the government schools in the fourth grade are not behind in this subject.

BRAC faces the need for additional reading materials for the children and has started publishing a children's magazine which is now distributed in the schools. Six story books for graduates are being developed and a circulating library is also getting started. It will consist of a system of three colored boxes per area containing story books. The yellow box will stay at one school for two months, then will be switched for the blue or red box at a neighboring school, and so on. BRAC has had much difficulty finding stories and books suitable for rural children and now is in the process of getting stories written and printing its own books.

In addition to books, each child receives one slate and slate pencil plus pencils, erasers, a lap board and 12 to 18 notebooks a year. The students make their own rulers from bamboo, based on a sample provided by the teacher. Each school receives a supply of materials every two months; these are kept in the school trunk until they are required by the students.

The BRAC schools have no formal annual examinations such as those which are a major feature in the government schools. The progress of the students is measured through carefully recorded, continuous assessments by the teacher, utilizing weekly and monthly tests. Students with learning difficulties and cases of individual problems are discussed in the monthly teacher training meetings and solutions are sought.

The BRAC teaching method is intended to be learner-centered and participatory, although not all teachers achieve this goal. The BRAC schools want the children to be active participants in learning rather than passive recipients of information. The emphasis is on the functional use of learning, not success in examinations, and the children's inquisitiveness is encouraged. In Bangla instruction, comprehension of words is stressed, rather than correct pronunciation. (The BRAC teachers themselves often do not pronounce words in high-level Bangla.)

The curriculum in BRAC schools differs from that of the government schools in several significant ways, although the major differences between the two systems are not as much in content as in teaching methods and teacher commitment. Basic reading, writing and mathematics are similar in the first two years. In the third year, the mathematics taught in the BRAC schools are quite different from that in the formal schools. BRAC schools emphasize the uses of mathematics for simple accounting, measurement, and handling of money. BRAC's social studies programme is almost totally different from that in the government schools. Its focus is on health concerns and values related to cooperation, relationships with neighbors, population problems, problems of early marriage, dowry and so on.

Due to the relatively small size of the BRAC classes, the children can participate actively. In reading, for example, the teacher may read model passages but each child also has a chance to read to the class. During social studies the topics are discussed, not "taught." On a subject such as water, for example, the teacher will first lead a general discussion in which the students tell what they know about water, then the teacher will suggest that they all look at the book together. The teacher will ask questions about the pictures. Discussions among the students are encouraged. Often a student is brought to the board and the other children help by discussing and correcting what the student writes. The students learn concepts through activities.

The teachers are taught to utilize positive reinforcement when a child completes an assignment properly or participates actively in classroom discussion. The teachers are expected to set an example for attendance and punctuality and to be self-disciplined, thereby becoming

role models for the students. The teachers involve the children in maintaining classroom discipline. For example, individual students are selected by rotation as classroom leaders for a day or for a week at a time. The teachers see their main job as one of keeping the students motivated, interested and busy with varied and non-monotonous activities. They do not define themselves as disciplinarians.

In most villages the relationship between teacher and student in the BRAC schools is close because of the small class size and because the students stay with the same teacher for all three years. Children feel secure in the BRAC schools because the school is close to the child's home and close to the teacher's home. Some teachers give individual attention to the students on health and other matters outside the classroom.

Parent and community participation

BRAC entered the field of non-formal primary education in response to the demand from village poor people. As a part of its rural development work, BRAC for over 15 years has been providing functional education for adults, including conscientization, basic literacy and numeracy. In many villages, after the people became organized and active in various income-generating activities, they began to ask BRAC: "What about our children? The existing schools don't meet our children's needs." BRAC finally responded by experimenting with its first primary schools. Now the more schools BRAC opens, the more the demand grows.

All evaluations of the BRAC schools have reported that one of the most important factors in their success is community and parent involvement. Before a school opens in a village, the parents of the targeted students must demonstrate their desire for their children to go to school. They must help find or build a classroom that can be rented at minimal cost and they decide what hours of the day the classes should be held.

Each school is administered by a committee of five, made up of two parents, a community leader, the teacher and the BRAC Programme Organizer who supervises the school. Parent meetings are held monthly. Attendance is high: on the average, 80%. Since the meetings are held during the day, it is mostly mothers who are able to participate. A recent set of interviews of a random sample of parents conducted by an external evaluation team found that only 4% of the parents had never attended a parent meeting. At the meetings the parents discuss their children's progress and any school problems that may arise. Both

the teachers and the supervising Programme Organizer attend these meetings and the latter must make a report on every meeting to his Field Officer supervisor.

The school committees have not remained active in some of the villages, but in such cases the parents have taken over the committee's duties, which consist primarily of setting the time for classes and vacation periods, assuring regular attendance (the goal is 100%), cleaning and maintenance of the schools, and protecting school houses and furniture from theft and calamities such as floods. The school committees or parent groups also find ways to assist the teacher with special problems that may arise.

Organization and management

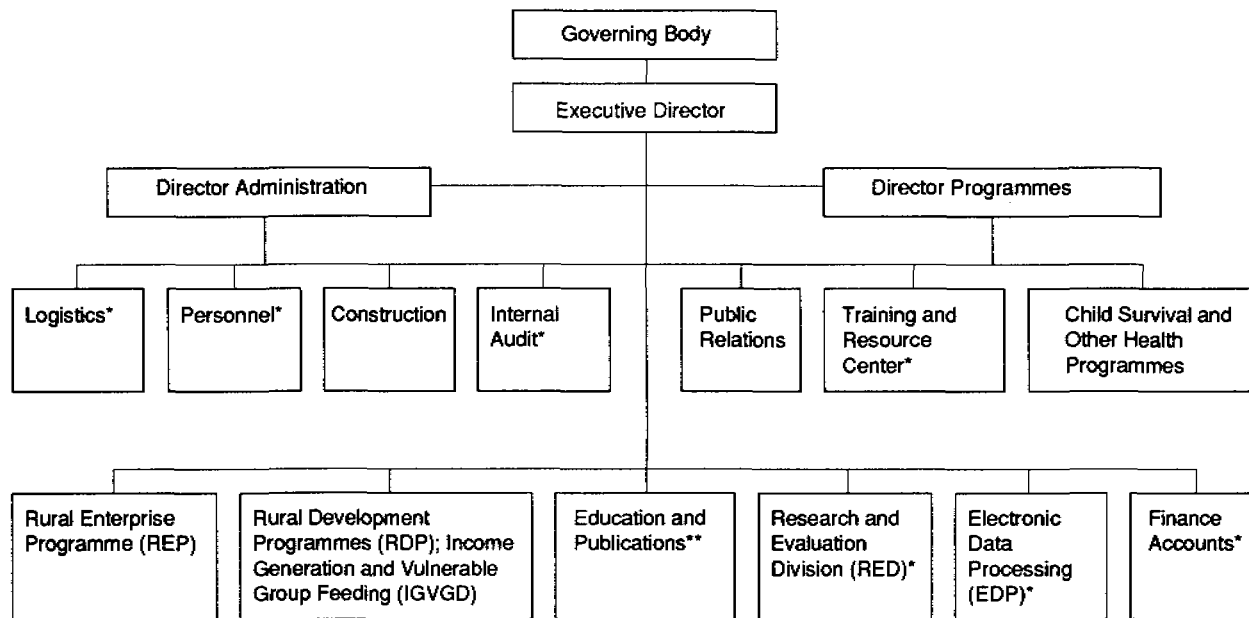
Management

The management system of the schools has been kept simple, but it has grown and adjusted to the increase in the number of schools. The two figures which follow explain the management structure. Figure I is an organization chart of BRAC programmes as a whole, showing the relationship of the school programme to other BRAC programmes.

Figure II shows the structure of the NFPE programme and numbers of employees in each category as of 1989, when there were 2,230 schools.

Management and supervision are accomplished through a structure which includes a central office Programme Manager and staff consisting of one Educational Specialist, several materials developers and illustrators, a Regional Manager, a Monitor who analyzes and follows up on field reports, and secretarial assistance. The Programme Manager is advised by a committee composed of senior staff of other BRAC programmes such as the various rural development, income generation, rural enterprise, health and para-legal programmes. As Figure II shows, the programme's central office is very small. A great deal of responsibility is delegated to the Field Officers. Like all other functional programmes of BRAC, the NFPE programme is served by the various support offices of BRAC (personnel, accounting, training, etc.) shown in Figure I and marked with asterisks.

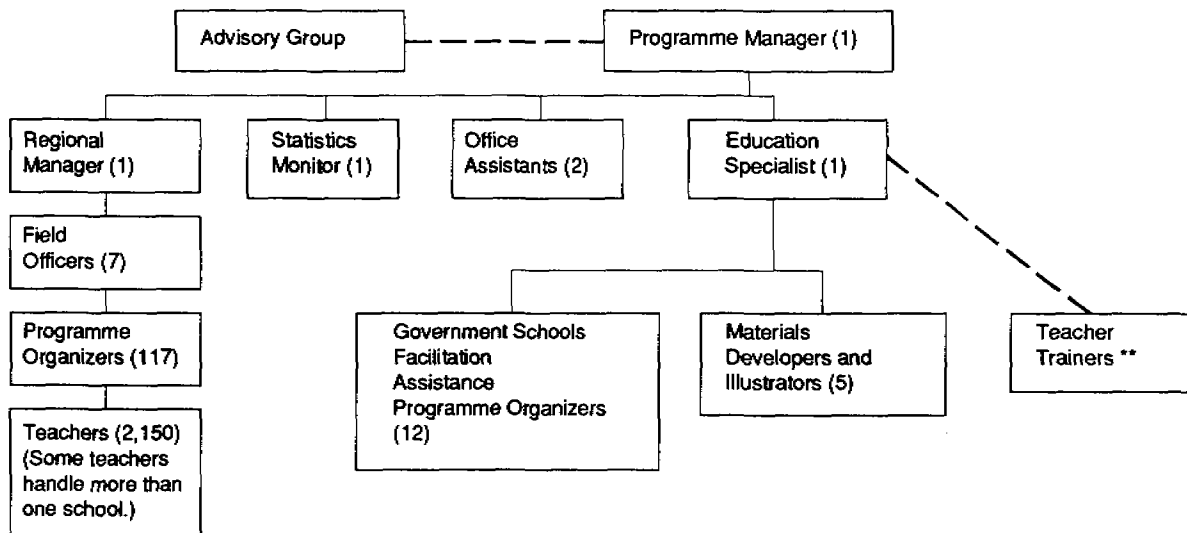
FIGURE I
Bangladesh Rural Advancement Committee



* The sections marked with one asterisk serve all the functional programmes.

** See following organization chart, Figure II, for structure of Education Programme.

FIGURE II
Non-formal primary education organization chart-1989*



* On this date there were 2,200 schools. The numbers of employees in each category at that time are shown at the right of each box. Please note by reference to Figure I that the programme is also served by the various support offices of BRAC.

** The teacher training function is performed in cooperation with BRAC's Training and Resource Centers (TARC) and the teacher trainers are directly supervised by TARC, although the Education Specialist works closely with them. The number of trainers used in NFPE in one year varies according to need and scheduling.

In the field, under the Regional Manager, are Area Field Officers, each of whom oversees five to six areas with a total of about 200 schools. Each Programme Organizer oversees 15 to 20 schools. Although there is a clear hierarchy in the management of the programme, teamwork and self-discipline are the norm.

Table 1 presents the education and training requirements and salary ranges of the various staff positions in the programme as of June, 1989.

The Programme Manager in charge of NFPE since the inception of the programme is a University of Dhaka graduate with a master's degree in psychology. Her job has been to develop, with the assistance of consultants and her staff team, the entire programme from conceptualization and experimentation through implementation. She manages the programme and relates to other programmes in BRAC, to external donor groups and to evaluation teams. She reports directly to the Executive Director.

The Education Specialist, who has a doctorate in education and many years of teaching experience, supervises the teacher training, including training of trainers, the training calendar, the training modalities and the development of materials. He also provides advice on educational problems to the Programme Manager, Regional Managers and Area Officers. When his time allows, he drops in on the monthly teacher training courses and visits schools.

The Regional Manager has 12 years of experience in BRAC. He is a university graduate with a master's degree. His main responsibilities are to oversee and develop the Area Field Officers, evaluate personnel performance in his region and manage logistics. He conducts Area Officer meetings as required.

The Area Field Officers are also persons with experience in other BRAC programmes or who have had several years of experience in the school programme. They are the key field management personnel in the programme. Their job is to help choose villages, recruit teachers and develop and supervise the Programme Organizers through regular meetings, analysis of the Programme Organizers' weekly action plans and analysis of required status reports. The Field Officers assist the

TABLE 1

Education and training requirements and salary ranges

Category	Education requirements	Experience	Days in pre-service training	Days of refresher training per year	Salary range in Taka per month*
Programme Manager	Post Graduate	8 years in BRAC	---	---	9,050-12,650
Education Specialist	Post Graduate/ Ph.D.	18 yrs. in teaching; 3 1/2 yrs. in BRAC	---	---	7,050-9,825
Regional Manager	Post Graduate	12 years in BRAC	---	---	7,050-9,825
Area Field Officer	Graduate/ Post Graduate	2-5 years	Teacher training: 12 days; Staff orientation: 12 days	Staff Dev. NFPE Mgmt. training: 12 days; Trainer training: 12 days	2,900-4,400 3,700-5,500
Programme Organizer	Graduate/ Post Graduate	1 month-4 years	Staff orientation: 12 days; Teacher training: 12 days	Staff Dev. NFPE Mgmt. training: 12 days; Trainer training: 12 days	2,350-3,550
Teachers	Min. 9-10 yrs. schooling/ SSC/HSC	Not necessary	Teacher training: 12 days	6 days training at beginning of 2nd yr.; 1 day monthly refresher	Tk 350 1st yr. Tk 375 2d yr. Tk 400 3rd yr.
Teacher Trainers	Graduate/ Post Graduate	Min. 2 yrs. in BRAC	BRAC trainers training: 7 days; NFPE trainers training: 7 days; Teacher training: 12 days	Teachers workshop: 7 days	2,900-4,400 3,700-5,500

* All regular, permanent employees (which excludes teachers) after probation and confirmation get benefits of: provident fund; gratuity; two festival bonuses per year; group insurance coverage. The exchange rate is approximately Tk 33/US\$1.

Programme Organizers with the monthly teacher training sessions when needed and generally assist with problem solving. They visit schools and parent meetings as their time permits, in order to help identify problem areas and evaluate Programme Organizers and teachers.

The Programme Organizers do not all have previous experience in BRAC or in rural development work, although many originally come from villages. Their job is the first-line supervision of the teachers and the schools. They receive at least five days' training in effective supervision, and they all must attend the 12-day basic teacher training course along with the teachers, as well as the two-week training-of-trainers workshops required of the teacher-trainers.

The Programme Organizers, until recently, have all been young men who are university graduates. In the past, no women were hired for these jobs because extensive travel on motorcycles or bicycles, sometimes alone at night, is required and such travel is not acceptable for women in Bangladesh. BRAC has now started experimenting with employing women as Programme Organizers in some situations.

The job of the Programme Organizers is to supervise and assist the teachers and to work with the parent groups. They must visit every school in their areas as often as possible, but never less than twice monthly. They attend and report on monthly parent meetings and conduct the monthly teacher training sessions. During each school visit the Programme Organizer is expected to do the following:

- Check on the cleanliness of the classroom
- Check the position of the blackboard
- Check on the teacher's lesson plan
- Test the children's academic progress in each subject
- Observe behavioral changes in the students
- Check the cleanliness of each student
- Check the attendance and punctuality records of students
- Observe class discipline
- Check cleanliness of the teacher

- Check attendance and punctuality of the teacher
- Check on required materials
- Observe teacher-learner relationship
- Observe the teacher's methods, uses of aids, participation of students, and learner interest
- Observe co-curricular activities
- Identify problems of students such as sickness or family problems that are interfering with learning, and find ways of problem solving
- Generally assist and develop the teacher
- Help the teacher plan for the following month.

For each item on this list the Programme Organizer has been given guidelines about what to look for and suggestions on how to proceed. Programme Organizers work with parents and teachers to ensure student attendance and punctuality. They also help organize the monthly parent meetings. They check on materials needed, set up schedules for monthly training and annual refresher training courses. They make sure that necessary data for the reporting system is prepared and are responsible for its submission.

The Programme Organizers perform essential first-line supervision functions. Evaluation studies of the schools have shown that where the Programme Organizers are weak the schools are likely to be weak.

The management system includes a regular data reporting system from which data on attendance, children's progress, parent participation, and problems are collected. These data are analyzed and discussed at each level and then consolidated and passed to the central programme office at BRAC headquarters in Dhaka for further analysis as input to policy-making.

BRAC is currently rethinking the management structure because of the rapid growth in the number of schools. More Regional Managers, Area Officers and Programme Organizers will be needed. The management structure may be divided into two sections: 1)

Technical Support, which would include curriculum, materials development, and teacher and supervisory training; and 2) Operations, which would include establishment of schools, teacher recruiting, logistics and general field supervision and work with parents.

Costs and funding

The annual cost per student borne by BRAC is about \$15. This per capita figure covers the full cost of the programme including rental of facilities, teacher salaries, training, recruiting, supervision, materials, curriculum development and management. The parents and the community bear the cost of maintaining the classroom facility, as well as the opportunity cost of losing the labor of their children for a few hours each day and the time they, as parents, lose from work to participate in school responsibilities. The pie chart in Figure III provides a breakdown of the recurrent costs of operating the schools.

BRAC receives the funds to support the schools from several donors. The initial donor was Interpares (Canada), which contributed money from 1985 through 1988. It was joined in 1986 by NORAD (Norway), which has continued to contribute each year. SIDA (Sweden) became a contributor in 1989. UNICEF joined the donors in 1988 with special financing for the first experimental schools for 11- to 14-year-old children. Two hundred of the 920 experimental schools for 11- to 14-year-old children were financed by UNICEF through a three-party agreement with the Government; the remainder were financed by BRAC's other funds. Table 2 gives the amounts of these donors' contributions.

The government primary schools are supposed to be free including educational materials. The regular government budget, augmented by international donors including UNICEF, IDS, UNDP, and UNESCO, provides the funds. In practice students are asked for various contributions such as materials fees and examination fees. In a recent documented case, a very bright girl who graduated from a BRAC school and transferred to the formal school for the fourth grade could not be passed on to the fifth grade because her parents could not pay the "examination fee".

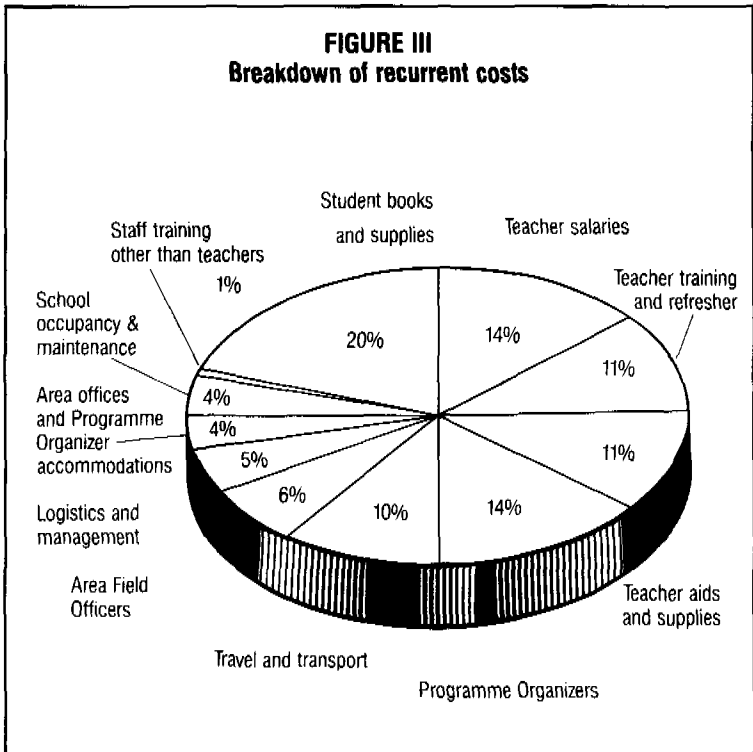


TABLE 2
Funding of BRAC's non-formal primary education programme (1985-1989)

Donor	Approximate amount in US\$*
Interpares (Canada)	200,800
NORAD (Norway)	382,400
SIDA (Sweden)	715,000
UNICEF	57,886**

* The US\$ amounts are approximate because they were translated from the Bangladesh Taka amounts received by BRAC using a rate of Tk 33/US\$1, which may not have been the exact exchange rate for the years covered.

** The UNICEF contribution was made especially to the PEOC programme for the older children. UNICEF also provided some supplies for the schools. In addition to the above funds, BRAC has also operated some of the schools using funds from their Rural Development Programme, which is funded by some of the same donors and others.

Rapid expansion

The efforts of non-governmental primary schools in Bangladesh should be set in the national context. See Table 3 below.

The programme has expanded rapidly--from 22 schools in 1985 to 2,500 schools by the end of 1989, with a planned expansion to 4,500 by 1991. Donors are offering money to BRAC to expand even faster. One major international donor agency is offering money to expand to 7,000 new schools for the 8- to 10-year-old children by 1993; another donor is proposing funds to BRAC to open another 6,000 schools for the 11- to 14-year-old children in the same period. One might well ask at this point: "How has it been possible to grow so rapidly and will BRAC be able to handle further rapid expansion?"

The main factors that have facilitated the rapid growth appear to be BRAC's experience and operational mode and the support systems that were already in place and available to the programme. BRAC has had almost 15 years of experience in running rural development programmes, one of them a very large-scale nationwide health programme. BRAC already regularly works in some 2,500 villages with more than 5,000 village organizations. Over the last 15 years it has provided

TABLE 3

Number of primary schools and teachers in Bangladesh in 1986

Number of Primary Schools in Bangladesh	
Government Primary Schools	36,422
Non-Government Primary Schools	7,290
Total	43,712
Number of Primary School Teachers	
Teachers in Government Primary Schools	154,446
Teachers in Non-Govt. Primary Schools	30,172
Total	184,618

Source: Bureau of Statistics, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka, Bangladesh.

functional literacy classes to hundreds of thousands of village adults for which thousands of teachers were trained, in a programme that received UNESCO's NOMA prize for outstanding contribution to adult education. BRAC's five Training and Resource Centers (TARC) have trained several hundred thousand villagers in income generation and leadership skills in addition to providing training to staff, many other NGOs and government officials.

BRAC has always operated in a learning mode: try something, enlarge on what works, replicate what is effective, change what doesn't work, improve what needs improvement. Over the years BRAC has learned to listen to rural people and has tried to help them achieve what they want; one of the things they now want is free schools where their children can attend and succeed.

BRAC's experience with community participation, its knowledge of the values and behaviors of village people and its programme implementation experience were essential ingredients for the success of the non-formal primary schools. But, equally important has been the availability to the school programme of all the essential support systems that BRAC has built up over the years. The rapid growth would have been impossible without a Personnel Office to recruit and maintain records of BRAC employees; an accounting department to handle the payroll and field expenses, account for donor money and help with budgets; a logistics office to handle materials distribution, transportation and purchasing; training centers with expert trainers to provide training know-how and facilities for teacher and field staff training, a word processing center for the preparation of proposals and other documents, a materials development unit to assist with developing school books and teacher aids, BRAC's own printing company to facilitate printing of school materials, and the research and evaluation division to observe and provide feedback.

In addition to these organizational supports, BRAC already had in place some 60 rural development centers from which field staff members could fan out to work in villages. The thousands of landless village groups organized by BRAC could serve as bases for the schools. Most of the schools are located in areas where BRAC was

already present and that has helped facilitate growth. But from the beginning BRAC felt that it would also be necessary to test the model in other areas. Preliminary evaluations have shown that the schools in non-BRAC-organized areas have been almost as successful as those in BRAC-organized areas.

Evaluation

The first five years of experience with the BRAC schools has shown that poverty and gender are not insurmountable obstacles to primary education. Rural poor people want education for their children, as also evidenced by the low drop-out rates in Table 4. Demand in the villages continues to snowball. The recent devastating floods provided an opportunity to test the vitality of participation of the BRAC schools programme. The floods damaged the school houses, submerged and destroyed children's houses, caused hunger and disease. Under such circumstances BRAC was doubtful that the schools could be quickly restored to normal operations. But, as soon as the flood water receded, to everyone's surprise, many of the village committees and the parents and teachers took the initiative to resume classes before BRAC staff could reach their villages. In many cases children carried their books to safety in plastic bags.

The totally unexpected development that 95% of the NFPE graduates are now entering the fourth grade in public schools testifies to a new-found value in education and a new belief that even poor children can succeed. As previously mentioned, small class size, extensive community and parent involvement, emphasis on learning in the school without dependence on homework and help from parents, are important factors.

Experience with the programme has proven that para-professional teachers, carefully but quickly trained and paid a small stipend, can be effective. The programme has shown that young village women and men can become dedicated and responsible teachers if they are well

TABLE 4
Drop-out rates in the BRAC/NFPE schools

Year of school opening	Year of course completion	Number of schools	Initial enrollment	Number of drop-out students	Percentage of drop-out students
1985	1987	20	612	25	4.08%
1986	1988	153	4,576	115	2.51%
1987*	1989	262	7,862	93	1.18%
1988** (PEOC)	1990	224	6,720	62	0.92%
Total		659	19,770	295	1.49%

* The students enrolled in 1987 will complete their course in February 1990. But as most of them wish to continue schooling in formal school in the fourth grade, they will apply for admission in January 1990. BRAC has already submitted a requisition to nearby schools on their behalf.

** The PEOC students who started in 1988 completed the course earlier than expected and have been given the textbooks for the fourth grade. Donors have completed their evaluations.

Source: BRAC, Non Formal Primary Education Statistics Monitoring Office.

selected and receive good basic training and continuing refresher training courses, effective and consistent supervision, and structured guidance on what the children should learn and how.

One of the significant side-effects of the programme has been the employment of several thousand young adults, primarily women, in an activity where they gain a sense of self-worth and earn respect from the community. Some go even as far as saying that the dedicated BRAC teachers are becoming role models for other teachers.

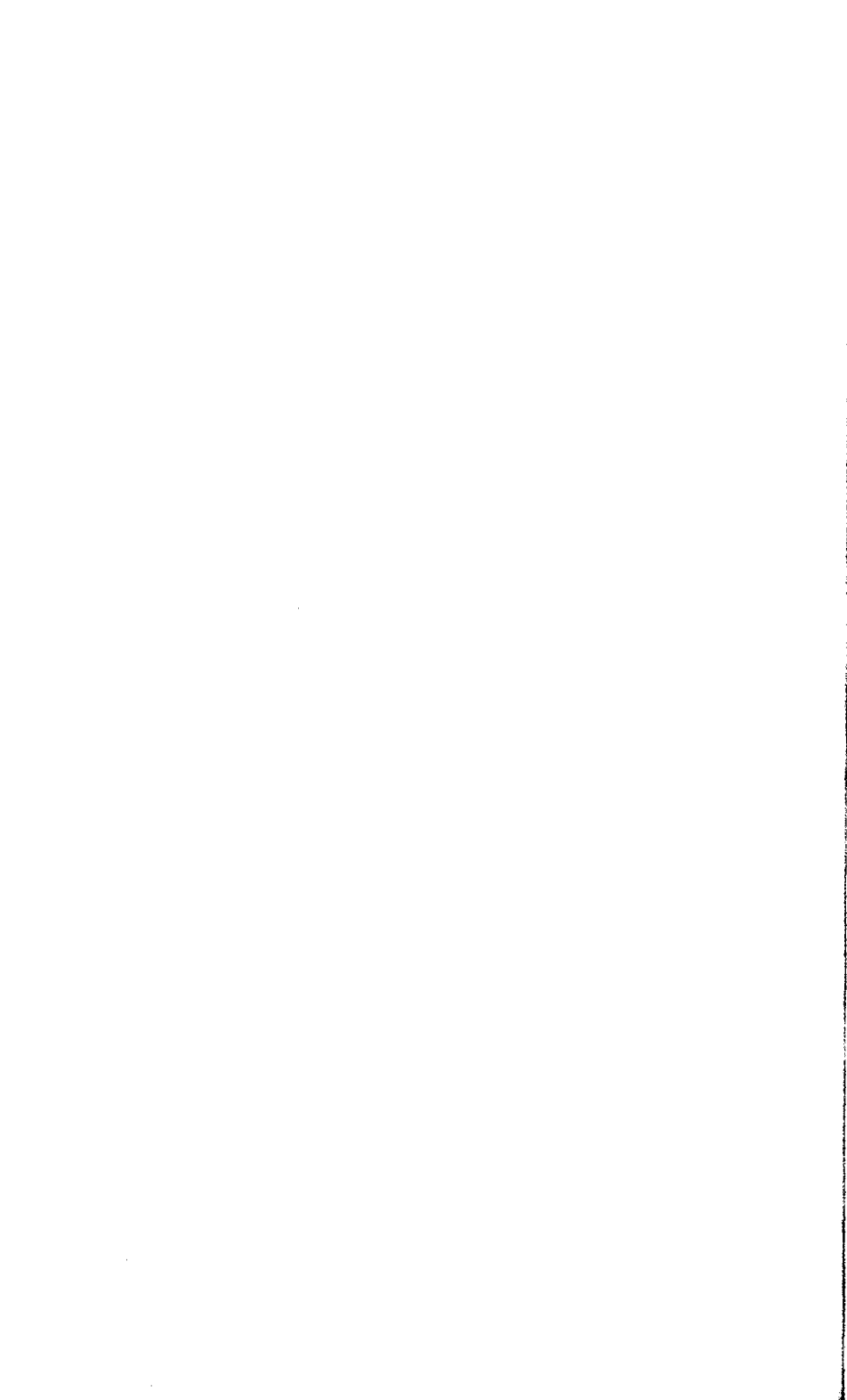
But what else have the first evaluations shown? One major external evaluation study⁹ financed by a donor group observed both BRAC and government schools in practice and interviewed a random sample of parents from both government and BRAC schools. This study's findings confirmed all the findings listed above and pointed to one essential additional variable. The fact that the BRAC schools are really free makes it possible for the targeted children to attend.

Although the parents always mentioned as benefits the dedicated and disciplined teachers and the fact that their children liked to go to school and are learning, they also mentioned the fact that the schools are free.

The study also pointed out a few problems. Tests, based on government school curriculum, were given to a random sample of 75 children each from BRAC schools and government schools. The results showed that after three years of education the average scores of the BRAC school children were slightly behind the government school children in mathematics and social studies, although they were equal in reading and writing. Standard deviations were similar for both groups in all three fields. The evaluation team attributed the lower performance of the BRAC children in mathematics and social studies primarily to the fact that they were all from the lowest socio-economic group, while the government school children were from middle-class homes and their better-educated parents were able to help them at home. The evaluation team suggested that BRAC will have to do even better to make up for that handicap. It is recognized that another contributor to the disparity in test scores may be the differences in the curriculum in the two systems, with BRAC giving more attention to the practical uses of mathematics and placing a different emphasis in social studies.

BRAC itself is conducting long-term research on the programme and in 1988, the Research and Evaluation Division of BRAC started a 10-year longitudinal study to follow a random sample of the students. The study will provide information on what happens to these children and will attempt to answer questions such as: "How many transfer to the government schools?" "How long will they stay?" "To what extent do they succeed?" "If they drop out, why?" "What are the effects of primary education and school continuation on marriage ages?" BRAC maintains all the names and addresses of its children. Other research projects are planned.

As this is written BRAC has invited a team of educational experts from outside Bangladesh to evaluate the programme and to help improve curriculum and materials.



The future

Several key questions now face BRAC, donor groups and the Government. The first set of questions are of strategic importance for BRAC's future orientation. "What is to be the continuing role of the BRAC schools?" "Are the schools to serve primarily as experimental models for testing ideas and methods for providing primary education to the unreachable, or should the BRAC school system be expanded and replicated throughout the country?" "Should the schools be extended to provide classes to the fourth grade and beyond, as some evaluators have recommended?" "Or can and should the successful elements of the BRAC programme be picked up by other NGOs and the Government, allowing BRAC to experiment further with different models (as they are doing with the 11- to 14-year-old children)?"

Why has BRAC continued to expand the three-year programme for the 8- to 10-year-old children when the experiment with the 11- to 14-year-old children has proved that basic literacy and numeracy can be achieved more cost-effectively with the older group? The answer is partly that most of the younger group who can pass the tests can transfer to the government schools while only some of the older ones are likely to do so. Because they are older, boys must work and girls get married or must help in the home. But, shouldn't the older children have an expanded programme because many are foreclosed now from the public schools?

A second major set of questions relates to how the Government is going to be able to respond to the unexpected entrance into the fourth grade of so many students from the BRAC schools. Steps will have to

be taken to avoid overcrowding of facilities and to provide sufficient teachers. Thought must also be given to meeting parents' demands for effective school performance from government schools.

As it continues to enlarge the three-year primary programme with the knowledge that up to 95% of its students will transfer to the government schools, BRAC must contend with the question of how much adjustment in mathematics and social studies must be made to its curriculum. Other issues also need to be addressed. "How can children of the poor be helped to succeed in the government system?" "Should special tutorial groups be set up for them, so they have the same advantage as have children whose parents can afford to hire private tutors?" "Should pressures be placed on the schools to eliminate the need for tutors?" "How should the problem of school fees (even though illegal) be handled, since this is one of the reasons poor children drop out?" "To what extent should BRAC work with parents to help them to become more active with the government schools to improve quality?"

BRAC, with government consent, has recently started an experiment with a facilitation project for selected government schools, in which BRAC will help the community get involved in improving the schools. At present, SIDA, the Swedish aid agency, is funding the project in three *upazilas*. In discussion with education officials, 135 schools were selected for this experimental project. This programme is too new to be able to evaluate the results.

So far, BRAC's efforts in primary education are significant and influential but must be compared to the nationwide picture. There is no doubt that BRAC will enlarge its own non-formal primary education programme, but also it will continue to work with the Government and other NGOs to improve the quality and accessibility of all of primary education in the country. BRAC has gained the necessary political space within Bangladesh to carry out its own programmes by fostering a relationship with the Government that is constructive and based on mutual respect. This cooperative atmosphere has led the Government to study the BRAC experiment, to launch its own non-formal programme and to encourage other NGOs to launch similar programmes. BRAC will not only continue active programming in primary education

through its own programmes, but will continue to develop and demonstrate effective methods. It will continue to cooperate with the Government and other NGOs to bring literacy to rural people nationwide.



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APPENDIX

Course content: Non-Formal Primary Education, BRAC

Course duration: 3 years

Subjects: 1) Bangla; 2) Mathematics; 3) Social Studies; 4) English

1) Bangla (Vernacular)

Phase I

- Recognizing and writing alphabets (using “look and say” method)
- Developing reading skill (not using conjunct consonants letters)
- Learning to make and write simple sentences
- Comprehension
- Learning to write on simple subjects in 5/6 sentences.

Phase II

- Learning to read and write using conjunct consonants
- Development of vocabulary
- Learning to read books using conjunct consonants
- Learning to read simple short stories and other materials
- Comprehension: learning to understand the meaning of simple reading materials
- Learning to write letters in simple language
- Recite poems.

Phase III

- Learning to read advanced materials (up to level of class III)
- Development of vocabulary
- Learning to write descriptive essays on simple subject matter
- Developing advanced letter writing skills
- Comprehension
- To recite and understand meaning of poems.

2) Mathematics

Phase I

- Recognizing and learning to write numerals up to 100
- Simple addition and subtraction up to 100 (with two digits)
- Simple problem-solving with two-digit numbers.

Phase II

- Concept of tens and hundreds
- Concept of multiplication
- Learning tables up to 10
- Concept of division
- Using addition and subtraction in solving problems
- Learning to use multiplication and division in solving problems
- Learning to recognize and write large numbers (up to 1,000)
- Addition and subtraction using large numbers
- Learning addition and subtraction using decimals
- Recognizing coins and paper currency. Solving problems relating to money, using addition and subtraction
- To learn, understand and use common units of measure for length, liquid and weight, using metric system:
 - a. Measuring length
 - b. Liquid measure
 - c. Measuring weight
- Learning to read a calendar
- Learning to tell time in units of hours, minutes and seconds.

Phase III

- Learning to recognize and write large numbers (up to 10,000)
- Learning tables up to 16
- Multiplication, using two-digit numbers
- Learning division, using tables up to 16
- Learning to recognize basic geometrical shapes
- Basic concepts of fractions
- Solving problems by using addition and subtraction
- Solving problems by using unitary method.

3) Social Studies

Phase I

Family

- The child and the family members
- The child and the environment: village, union, sub-district and district.

Food and its sources

- Necessity of food and its sources
- Nutritious food at low price
- Locally available fruits
- Rotten food and its harmful effect
- Causes of food contamination and its effects
- Safe water.

Cleanliness

- Distinction between clean and dirty environment
- Necessity and benefit of cleanliness
- Harmful effect of dirty environment
- Personal hygiene
- Clothing, furniture and its cleanliness
- Homestead cleaning.

Dwelling house

- Necessity of a dwelling house
- Description of own house
- Provision for latrine and its maintenance
- Different types of houses, name of building materials
- Domestic animals and their care.

Domestic animals and pets

- Feeding and caring of animals.

Social system

- Location of village, its communication system, housing and important institutions, e.g., mosque, temple, market, health centre, etc.
- Necessity of mutual cooperation
- Different professions, role of different professional groups in society.

Direction and time

- Conception of left, right, front, back, upward, downward, etc.
- Naming four directions, i.e., east, west, north and south
- Determining direction
- How day and night occur by rotation
- Naming the days of week and the 12 months.

Festivals and recreation

- Leisure and recreation
- Social and religious festivals.

Child safety

- How to avoid common accidents like cuts, burns, animal biting, drowning, etc.

Social norms

- Discipline
- Civility.

Habits

- Discipline
- Manners.

My country

- National anthem, capital, history of liberation war
- National flag, national language, national flower, national fish, national bird, national fruit, national animal, etc.

In phase I for Social Studies the teacher uses a guide book and chart. The children learn through observation, dialogue and discussion.

Phase II

Family and family environment

- Family members, kinship, home, different household work performed by family members
- Neighborhood, relationship with neighbors.

Community

- Community member, relation with community member
- Social festivals like marriage, independence day, fair, etc.

Food

- Sources of food
- Necessity of food, classification of food
- Balanced diet
- Contaminated food, food wastage, food requirements at different age and sex.

Hygiene

- Care of different parts of body
- Physical exercise
- Personal hygiene.

Nutrition

- Nutritious food at low price
- Retention of food value while cooking
- Weaning for children.

Infectious disease and immunization

- Control of diarrhoea
- Prevention of dysentery, worms, typhoid, etc.
- Vaccination against six diseases, e.g., diphtheria, whooping cough, tetanus, measles, polio and tuberculosis.

Season

- Winter, summer, spring and rainy season.

Dwelling house

- Bedroom, kitchen, cowshed, latrine, etc.
- Source of water.

Domestic animals

- Mammals, birds, etc.
- Usefulness of domestic animals and their care.

Village level institutions

- School, madrassah, mosque, club, post-office, hospital, police station, etc.

Ecological system

- Soil, water, air, forest, animals
- Pollution.

Living and non-living objects

- Matter
- Earth
- Concept of day and night.

Crops

- Cropping environment.

From phase III the children learn through reading books, discussion and observation.

Phase III

Food

- Classification of food, functions of different classes of food in human body
- Food for pregnant women, weaning.

First aid

- Cuts and burns
- Fits, vomiting, drowning, snake-bite, fracture.

Disease and its prevention

- Infectious diseases like diarrhoea, tetanus, typhoid, scabies, tuberculosis, worms, etc.
- Night blindness, causes and remedy
- Anaemia, its causes and remedy
- Communicable and non-communicable disease.

Immunization

- Vaccination against six diseases, e.g., diphtheria, whooping cough, tetanus, polio, measles and tuberculosis
- Some superstitious practices relating to illness.

Income generation

- Kitchen gardening, poultry, cottage industry, small trading, etc.

Promoting common interest

- Social bondage at community level
- Community action
- Arbitration of village strife
- Plantation.

Social evils

- Dowry
- Superstitions in day-to-day life.

Population problems

- Comparison between small and large family
- Menace of overpopulation.

Eco-systems

- Soil, air, water, forest, sunlight, etc.
- Flora and fauna of Bangladesh.

My country

- Its history, liberation war, different religions
- Topography, national boundary
- Resources of Bangladesh.

Universe

- Continents
- Solar system.



The designations employed in this publication and the presentation of the material do not imply on the part of the United Nations Children's Fund the expression of any opinion whatsoever concerning the legal status of any country or territory, or of its authorities, or the delimitations of its frontiers.

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