

THE POPULATION EDUCATION RESEARCH PROJECT

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The introduction of population education in the school system of the country is a major component of the population planning programmes of the Government of the People's Republic of Bangladesh. While the Government agencies were busy in policy-making, the Institute of Education and Research of the Dacca University took the lead in this regard and launched a two-year Pilot Research Project on Population Education.*

PURPOSE AND SCOPE

The purposes and scope of the Population Education Research Project are :

- (1) Development of Population Education materials for both students and teachers;
- (2) Testing of the materials in actual classroom situation;
- (3) Evaluation of the materials and other aspects of the programme;
- (4) Consolidation and analysis of the findings in the form of a published research report.

The operation of the project activities is confined in two selected thanas (counties) of the country - Mirzapur in the district of Tangail and Ishurdi in Pabna. All the fifty-five secondary and junior secondary schools of these two thanas have been brought under the purview of the project. The total number of 9395 students of Class VI, VII and VIII of these schools constitute the population of the main aspect of the research project. The subject teachers of general science and social science - subjects related for introducing population education - of these schools form the second treatment population. The project activities in functional terms include developmental activities, experimentation and evaluation, research and finally writing of the research report.

THE FIRST YEAR

The activities and accomplishments of the project during the first year i.e. July 1974 to June 1975 are stated hereunder:

Developmental Activities

1. Establishment of Resource Centre on Population Education initially with the collection of materials from the project personnel. Later, large quantity of population education and related materials from the Ford Foundation and other international agencies were acquired.
2. (a) Selection of two thanas Mirzapur and Ishurdi, having 55 secondary schools with an enrolment 9395 in grades VI, VII and VIII, as experimental areas of the project on the basis of certain criteria.
(b) Selection of school subjects and survey of contents for identifying the nature and quantum of population related elements in the existing textbooks of these subjects.
(c) Development of general objectives for introducing population education materials in the grades and subjects selected.
(d) Selection, in the light of general objectives, of the broad areas wherefrom population education curricula were to be developed.
(e) Selection of appropriate topics from the existing textbooks in social science and general science for integration of population education materials and determination of the nature and process of integration.
(f) Development of population education sample materials on the average of 14 lessons for each of classes VI, VII and VIII in general science and social science subjects along with teaching guides for the teachers of these subjects.
(g) Development of testing instruments to be administered to headmasters and teachers attending workshops.
(h) Holding the first workshop for headmasters and teachers concerned and reviewing the sample teaching materials for students and teaching guides for teachers.
(i) Finalizing the reading materials and teaching guides and developing teaching aids and testing instruments for the students and having these materials printed.
(j) Holding second workshop for presentation of printed materials to teachers concerned and for orientation of the teachers.

These developmental activities were completed within a period of eight months (July 1974 to February 1975) and with that the first phase of the Project activities was over.

Experimentation and Evaluation

The second phase which relates to experimentation and evaluation of population education materials began from 15th March 1975 when the participating schools started teaching population education materials in grades VI, VII and VIII in their respective schools. This phase will continue till the end of the school year in December 1975. While the schools teach the materials, the project personnel will make periodic visits to schools for observation, discussion and evaluation of materials, performance of teachers and other aspects of the programme. During the first quarter of 1976, the findings of the experimentation and evaluation of different aspects the project will be analysed. The research report is expected to be published by the end of June 1976.

CURRICULA AND READING MATERIALS DEVELOPMENT
UNDER THE PROJECT

The population education research project envisaged, among the activities, the development of curricula and reading materials for classes VI, VII and VIII. The research team, after considerable discussion and careful consideration, decided that population education materials would be integrated into the school subjects of general science and social science. A survey of six textbooks, three in social science and three in general science, two each for Class VI, VII and VIII was conducted with a view to identifying the extent and nature of population education related contents in the textbooks published by the Textbook Board and to locating the appropriate places for meaningful integration of population education materials. Then the researchers focused their attention to the task of deciding the objectives of population education. In doing so, they went through the available literature on population education and after a lengthy deliberations, decided the following objectives to be achieved through the introduction of population education materials in the selected classes.

1. To create population awareness through a study of population situation in the family, community, country and the world.
2. To help understand and comprehend the causes and consequences of high population growth in the country.
3. To develop awareness about the need of maintaining balanced relationship between the size of population and the environment and the natural resources obtaining within the country.
4. To develop attitudes so that in adult life the learners take rational decisions about family size and can intelligently participate in matters related to population policies and programmes.
5. The learners will share their knowledge and values related to population with their peer groups and families in their own environment.

The next step was to identify the broad areas related to population situation, issues, problems and consequences that would help develop population education curricula for the selected subjects. The broad areas identified were: the population phenomenon, the population characteristics, causes of high population growth, consequence of rapid population growth on food and health, economic consequences, social consequences etc.

The population education curricula thus developed, was again divided for classes VI, VII and VIII and this was done purely on the judgement and consensus of opinion of the researchers. The researchers also decided to develop lessons mostly for one class period closely linked with topics or sub-topics earlier identified during the survey of textbooks. A uniform pattern was followed for integrating the lessons with related topics. Considering the total course-load and load of the selected subjects for each grade, the researchers decided not to develop more than eight lessons in each subject for a particular class.

The writing of the lessons along with lesson plans was distributed among the subject specialists of the research team. In the course of writing the reading materials, frequent group discussions were held with the purpose of

full exploitation of the combined intellectual resources of researchers and for resolving controversial points, sharing each others experiences and maintaining vertical integration. The materials thus developed by the researchers were scrutinized and reviewed in a series of long sessions by the members of the research team.

The revised draft reading materials in the form of lessons and lesson plans were presented in the first workshop of headmasters and subject teachers. General and group discussions were held by the teachers. The teachers were provided with evaluation sheets and were asked to evaluate each lesson and lesson-plan. They were also asked to give their overall opinion about the materials in writing.

In the light of the evaluation and teachers opinion, the lessons and lesson-plans were reviewed, revised and finally rewritten. Besides lessons and lesson-plans, the researchers developed some background materials for the teaching guides. Topics included as background materials in the teaching guides were: goals and nature of population education; necessary data for information related to population education; the consequences of population growth in Bangladesh; Bangladesh and other countries of the world - a comparison; some aspects of the world population problem; population: food, health and environment.

An editor, outside the research team, was appointed for editing all materials. The edited materials were printed in the form of booklets and were finally presented to the teachers in the second workshop for a general reading of the materials. The participating teachers were given the required number of booklets for distribution among the students in their respective schools.

TRAINING OF TEACHERS UNDER THE PROJECT

Population education being a new educational programme and that too being a goal-oriented programme, the training of teachers assumes greater importance. In designing the programme activities for this project, this particular aspect was given due and proper attention. Provision was made in the project proposal for two workshops - the first one for headmasters and subject teachers of the participating schools and the second one for the subject teachers only. Although the duration of workshops was give days, adequate preparations were taken for maximum utilization of time in a planned manner.

The workshops were conceived not only for orientation and training but also as a forum for participation by the headmasters and teachers in the development of reading materials and in planning the implementation of the programme. The training of teachers in this project constituted two main components: one was comprehensive understanding of teachers about population related matters and the other was related to teaching of population education. The novelty of the training programme was the involvement of the teachers in the development of reading materials for students and teaching plans for lessons on population education. The second workshop was, however, mainly devoted to training of teachers for teaching population education materials developed in general science and social science subjects.

DEVELOPMENT OF TEACHING AIDS UNDER THE PROJECT

Due importance was attached to selection and proper use of appropriate teaching aids by the classroom teachers. The project personnel with the help of professional artists developed a set of pictures and illustrations related to different lessons on population education and these aids were manifolded in sufficient quantity. The map of Bangladesh was another important aid needed by the teachers. This was procured from the audio-visual centre, Dacca. In the second workshop, these pictures, illustrations and maps were presented in special sessions and the teachers were given training as to how to use them properly. Moreover, during the training period, the teachers were asked to develop more teaching aids related to specific lessons as they continue teaching the materials.

EVALUATION PROCEDURE FOR THE PROJECT

The scheme for evaluation of the project activities as well as the outcomes of the experimentation with curricular materials consists of several different steps to be taken on a multidimensional approach of measurement. Some of these steps have already been taken and the remaining ones are to be taken according to a sequence in the scheme.

A Pre-Test for the participating headmasters and teachers of the first workshop was administered which consisted of two parts - the first part of the test was an achievement test containing 40 multiple-choice items on demographic and population related information and ideas. The second part of the test contains 30 items and was designed to measure attitude of teachers towards demographic and population problems of Bangladesh and their possible solutions. A five-point rating scale is used to record the answer choices for each item.

An opinionnaire in 3 parts was administered to the participants in the concluding session of the first workshop. The first part of this is a 38 items questionnaire dealing with various curricular aspects of the lessons on population. This was designed to evaluate the feasibility of the curricular materials as well as the training procedure. The second part is a 12 items, five-point rating scale, designed to evaluate the feasibility of each lesson and lesson-plan separately for each class and subject. In addition to this, the participants of the first workshop were also requested to put in writing evaluative comments in the margin of each draft lesson and lesson-plan. Data thus obtained were duly analysed and the result of this analysis provided the objective bases for modification of the curricular materials.

An equivalent version of this opinionnaire is being developed to administer to the participating teachers of the schools concerned at the end of the academic year 1975. The information to be obtained will be utilized for evaluation of the feasibility of the entire series of activities concerning the pilot project on Population Education in Bangladesh.

Special Examination of Students

On the last day of the second workshop necessary materials were given to the teachers to administer Pre-Test of the students and necessary instruction

regarding the process and method of administering the test was given to them. The first part of this test is an Attitude Scale of five point rating scale containing 50 items on population problems and their possible solutions. The second part of the special examination consists of an Achievement Test for each of the three Classes VI, VII and VIII. The participating teachers of the second workshop were instructed to administer both parts of the special test just prior to the beginning of teaching population education lessons designed for the project. Accordingly, the teachers had administered the test in their respective schools and sent the materials to the Research Services Centre which are being analysed.

By the end of the academic year 1975, when the teaching of the population education contents will have been completed, the above mentioned special examination will again be conducted in the selected schools as a Post-Test, using the same tests.

The data obtained by pre-testing and to be obtained by post-testing is expected to provide information concerning effects of the experimental variables on the primary target population and so to provide basis for testing the feasibility or relevance of some of the important assumptions of the researchers.

Internal Evaluation

Teachers are required to evaluate the students' achievements by internal classroom examinations. To maintain uniformity of practice among the participating schools, the classroom teachers have been instructed to evaluate the performance of each student on each lesson in a specified manner and record the same in a special register supplied to them.

- * The project team comprised the author and Drs. Md. Selim, Noorul Huq, Mazharul Haque, Obaidur Rahman, Nurunnahar Fayzunnessa and Mr. Iqbal Aziz Muttaqui.