CHAPTER SIX

REVIEW OF RELATED LITERATURE

The existence of the present always rests on the foundation of the past. A view of history always ascertains the firmness of our present situation. Hence, a summary of writings of recognised authorities and of previous research provides evidence that the researcher is familiar with what is already known and what is still unknown and untested. Since effective research is based upon past knowledge, this review helps to eliminate duplication of what has been done, and provides useful directions and helpful suggestions for significant investigation.

A deep study into the researches conducted gives the idea of research development in the sphere of Population Education.

Population Education Programme: In the Neighbouring Countries

With the financial assistance of UNFPA and Government, a number of Population Education Projects had been conducted wherein most of the projects, UNESCO acted as the executing and co-ordinating agency. They are published in the Directory of UNFPA. Some of them are discussed below.

Afghanistan

In the year 1985, the Population Education Project "Family Life Education Through Mass Education Programme" was implemented by General Agency for Literary Campaign, Ministry of Education to organise and develop Functional Literacy Programmes and materials for rural and urban related to family, health and guidance and to incorporate essential elements of Population & Environmental education thereof. The Project covered only out of school programmes i.e. General Literary Programme, Women's Programme, Agriculture & Co-operative Programme etc. The major achievements of the Project are

1. Population Education concept had been integrated into various subjects in grades IV and V of the compulsory education and in the text of mathematics book for women.

2. The instructional materials on the themes like Breast feeding, Early marriage, Environmental sanitation, Safe drinking water, Family budget, Balanced Nutrition, Responsibility of Family to Society, Guide book on Population Education were prepared and used.

3. Training/orientation programmes were conducted for the personnel and participants from ministries and organisations involved in out-of-school population education.

Bangladesh

The Population Education Project "Population Education in the Formal Education Systems" was implemented by Ministry
of Education and Religious Affairs. The total duration of the project was from July 1980 to June 1985. The main objectives of the project were such as:

a) To introduce population education in Classes IV to XII through supplementary teaching-learning materials,
b) To provide orientation to students of men's and women's colleges through extension lectures,
c) To develop sample teaching-learning materials for Madrasahs (religious education institutions) and vocational institutions,
d) To provide face to face training to 60,180 teachers of Primary, Secondary and tertiary level including teachers of Madrasahs, vocational, commercial and technical institutions,
e) To develop audio-visual kits for use in the pre-service and inservice training of teachers,
f) To develop resource materials, such as sociological almanac and national source book for the use of educators and teachers,
g) To produce three issues of the population education bulletin, to keep teachers and educators abreast of the developments in population education,
h) To organise radio and television programmes to strengthen population education programme in the formal education system,
i) To undertake evaluation of the materials, training programmes as well as implementation of population education programme at various levels,
j) To undertake longitudinal study of the impact of population education on the students of secondary schools,
k) To assist in the development of population education materials for adult education programmes.

The project only covered in-school population education programme.
The major achievements of the project are

1. Population education has been integrated in the textbooks for classes IV to XII.

2. Curricula for Technical Institutes and Students, materials for Poly-technic, Monotechnic, Commercial and Vocational Institutes had been developed.

3. The following types of personnel had undergone population education training: 77.5 per cent of college teachers, 56.77 per cent of Madrasah key personnel, 20.7 per cent of Fazil Madrasah teachers; 52.50 per cent of Alim Madrasah teachers, 71 per cent of Dakhil Madrasah teachers, 84.85 per cent of Secondary School teachers, and 98 per cent of the Primary School teachers.

4. Evaluation activities such as evaluation of the knowledge base and change in the knowledge of the students of classes IV and V in population education, evaluation of training workshops of different levels of teachers and study of knowledge, attitude and practice of Madrasah teachers on population education, were conducted.

5. The most important achievement was publication of a regular Newsletter, Population Education Bulletin and organisation of a Library and Documentation unit which also takes charge of disseminating publications.

China

Ministry of Education implemented a Population Education Project entitled "Population Education in Secondary Schools". This project was co-ordinated by Ministry of Education, Beijing, People's Republic of China. The duration of the project was from 1980-84; and from 1985 to 1989. The
The project was launched with the following objectives

(a) To contribute to the implementation of overall Government's Population Policy of reducing the rate of population growth from the present 12 per thousand to achieve zero population growth by the year 2000,

(b) To revise the curriculum of middle schools with the aim in view of integrating more population education contents and to facilitate sharing of experience in population education through seminars and study tours and to develop competencies in teaching population education among 8,000 middle school teachers through in-service training at ten pedagogical institutions which are to be equipped with audio-visual facilities, books and instructional materials.

(c) To assess the performance of the project and the impact of population education on teachers and students.

The project covers in school education mainly Secondary Schools and Pedagogical Institutes.

The major findings of the project are

1) A text book for the separate course in Upper Secondary Schools, an experimental text book, a text book for the training of teachers and a set posters on population education have been distributed nation wide. In addition many of the pedagogical institutes developed their own training and other materials, population education materials have been integrated in the book for Physiology and Hygiene, Biology and Geography.

2) Two national seminars and study tours were conducted for orientation/training.

3) Schools and institutes had been equipped with films, biological models and other teaching aids to help teachers to teach population education in the class
In Indonesia, population education was strengthened in the year 1984-85. The Population Education Project "Technical Backstopping of Population Education Programme" was implemented and co-ordinated by BKKBN (National Family Planning Co-ordinating Board). The objectives of the project are:

1. To assess the state-of-the-art of population education including strategies used, materials developed, expertise and resources available in each of the implementing units through a review of workshop,

2. To enhance sharing of experiences and deeper commitment to population education on the part of the officials of five implementing units and other concerned organisations by conducting a conference involving population educators from Indonesia and other Asian countries,

3. To develop innovative action programmes through a consultative seminar for the qualitative improvement of population education in order to fasten its institutionalisation,

4. To ensure better articulation and linkages, exchange of materials and expertise among the five implementing units, a seminar/workshop on "Effective System of Co-operation" will be organised,

5. To develop expertise in the various aspects of population education through the attachment of key personnel to advanced Asian population education programmes,
6. To ensure efficient and effective implementation of population education programmes in the five implementing units by organising periodic monitoring meeting.

7. To ensure wider dissemination up-to-date population information and innovative developments in population education through the publication of a bi-monthly newsletter.

8. To contribute towards raising age of marriage through an out-of-school population education programmes for young village women.

9. To conduct pilot studies on the relative impact of integrating population education in seven school subjects versus one or two subjects.

10. To assess the implementation of population education in each of the implementing units towards end of 1985 through an evaluation workshop.

The project covered both in-school and out-of-school programme. The study reveals that population education is taught from fourth grade (primary) upto class II of senior High School and offered as a course at the University level, especially in IKIPs and the State Institutes of Islamic Education. The Population education materials such as (a) Primary, Secondary and High School text books; (b) teachers' guide for primary, secondary and academy; (c) primary, secondary, High School and academy population education curriculum had been developed and workshops were conducted to develop and review curriculum materials, teachers' guides and text books.
During the period 1974 to 1984, Ministry of Education, Curriculum Development Centre had undertaken a population education project, "Population Education in the School System" to create an informed citizen capable of making responsible decisions with regard to population issues and population policy matters and to develop in the adults of the future positive attitude towards population matters as might be defined by the norms and needs of Malaysian society, to develop curricular programmes and instructional materials in population education for Malaysian schools (including teacher training institution), to produce instructional and learning materials in sufficient quantity for use in all Malaysian schools, to prepare teachers for the teaching of population as set out in the Curricular Programme, and lastly to evaluate the effectiveness of the population education programme. The project covered both in-school and out-of-school population education programmes.

The major findings of the project are

(a) self learning modules for training of teachers (in school) had been developed and video-taped programmes for orientation of State officers and heads of schools (in-school) had been prepared.

(b) The preparation of scope and content of a population education curriculum and teacher's guides for the lower secondary level in four subjects, namely, civics, science, mathematics and home science was completed.
(c) Staff development programmes for the staff had been conducted.

(d) An analysis of population education topics and content in the primary, secondary, and teacher training curriculum, syllabuses, text books and teachers guides was undertaken.

(e) A population education collection has been built within the project and to provide information to in-house activities.

Nepal


The objectives of the in-school Population Education Programme were

(a) To gear the entire educational system, formal and non-formal, to the realisation of the potential role of education in the developmental efforts of the country, and of the inter-relationships between population situation and different aspects of the quality of life at the micro and macro levels with the aim of promoting small family norm,

(b) To develop in the target audience an insight into the inter-relationships between population growth and the process of social and economic development at the individual, family, society, national and international levels,
(c) To develop desirable attitudes and behaviours in the teachers, students and the community at large towards population issues so that they may take rational decision about the family size and the quality of life that they would like to have,

(d) To institutionalise population education in the formal education system, including University and non-formal Education Programme of the Ministry of Education,

(e) To develop a population education concept relevant to national needs and requirements,

(f) To provide intensive refresher training to the project staff and trainers in formal education and project staff and trainers in adult education,

(g) To develop an effective monitoring, feedback and evaluation mechanism,

(h) To translate exemplar materials from English to Nepali and vice versa,

(i) To strengthen the establishment of Population Education Newsletter for the benefit of teachers, teacher educators, adult educators and other concerned personnel,

(j) To conduct research and evaluation studies of the impact on the target audiences of population education programme,

(k) To procure project inputs from funding agencies and the Government and release them to implement units,

(l) To conduct periodic reviews and evaluation through monthly meetings,

(m) To review draft curricula for Primary, lower Secondary and Secondary schools and Teacher Education Programmes with a view to ensure that population education contents are integrated into selective one or two
subject areas in the curriculum.

The objectives of out-of-school Population Education Programme were

(a) To develop in the target audience an insight into the inter-relationships between population growth and the process of social and economic development at the individual, family, society, national and international levels,

(b) To develop desirable attitudes and behaviours in the teachers, students and the community at large towards population issues so that they may take rational decisions about the family size and the quality of life that they would like to have,

(c) To institutionalise population education in the non-formal education programme of the Ministry of Education,

(d) To review draft integrated curricula with a view of basing it on the needs, problems and understanding of the users; reflecting in it new population education concepts and developing different sets of curricula to meet diversified needs of adult education audiences,

(e) To develop minimum learning packages to meet the learning needs of different audiences such as administrators, supervisors, village level workers, adult education teachers, local leaders including religious leaders and such other personnel organisers depending upon the local situation,

(f) To develop special audio-visual and written materials for illiterate and literate audiences living in the rural and urban communities,
To conduct a survey of the experimental pilot area composed of five districts in five regions to determine the levels of understanding, attitude and practice of the sample population about population and family planning, related issues, problems and recommendations.

To develop training packages for the training of adult education teachers and their supervisors.

To provide training to adult education teachers and their supervisors, and field workers of other collaborating agencies working in the experimental area.

To establish close working relations with other organisations engaged in out-of-school population education and ensure linkage with family planning service delivery programmes.

To conduct an evaluation of the experimental/pilot project covering all aspects of the programme such as curriculum and materials development, personnel training and impact of the programme on its ultimate beneficiaries with special reference to one small family norm and improvement of quality of life.

To motivate the adult learners attending adult education class in the pilot area to have smaller family size and to try family planning practices.

To review the draft document on the scope and sequence of population education contents covering all levels of formal education to ensure a reflection of the new population education concept and relevance of population education contents into that of the parent disciplines.

To review all draft teaching learning materials such as teachers' guides, training packages, and supplementary reading materials to further elaborate...
contents and provide appropriate number of illustrations keeping in view the maturity of the target audiences and the nature of the subject matter,

(o) To provide intensive face to face training to teacher educators, provide orientation to supervisors and headmasters of secondary schools,

(p) To provide face to face training to teachers of social studies and science of lower secondary and secondary schools; provide training to the under-qualified primary school teachers through pre-service and in-service training and through radio broadcasting programme.

The major achievements of these projects are worth mentioning which are described under the following heads.

A) Curriculum and Materials Development

(a) The programme has developed, pretested and revised supplementary materials for lower secondary and secondary school students.

(b) The programme has developed, pretested and revised teachers' guides for use in the primary, lower secondary and secondary school levels - covering population education as integrated into science, health and social studies.

(c) The programme has developed text book for use in teaching population education as a separate course in grades IX & X.

(d) A national source book on population education and sets of slides for use in the teacher training programme had been prepared.

(e) Self-learning materials integrating population education into economics at the University level had been developed.
(f) Curricula and appropriate instructional materials for teaching population education at the certificate and Bachelor Levels had been developed.

(g) The programme has developed and distributed textual booklets, posters and charts to adult learners in the non-formal sector.

(h) Guide Books for the field workers and curriculum for non-formal education had been developed.

B) Orientation/Training

(a) The programme has provided training at the regional and district levels to selective supervisors to prepare them in training teachers and to the staff in preparing radio scripts which will be used to train teachers under distance-learning approach.

(b) Training of teacher educators and sending of personnel for fellowship had been undertaken.

(c) A national seminar on the role of population education in the non-formal education and the training of teachers in population education in the non-formal sector had been conducted.

C) Research and Evaluation

The programme has conducted a survey of knowledge and attitude of students, teachers and parents towards population education both in the in-school and out-of-school sectors.

D) Communication/Information/Documentation Support

(a) Population Education News letter is regularly being printed.
(b) The programme has organised population education collection/libraries in implementing offices.

Philippines

In the year 1984, Ministry of Education, Culture and Sports, Manila, Philippines undertook a population Education Project "Regionalization of Population Education" which was executed by the commission on Population. The project was launched in the year 1982. The objectives of the project were as follows.

(a) To achieve the general goal and ensure the institutionalisation of population education in the thirteen (13) MECS regions by extending and expanding the present population education programmes in those regions and making them more responsive to regional needs, the following long range objectives have been designed:

(i) To ensure effective learning of population education concepts through the adaptation/development and production of curriculum materials appropriate to regional needs and situations for both the formal and non-formal education target audiences in public as well as private institutions,

(ii) To strengthen regional capabilities to manage, supervise and evaluate the regional population education programme, conduct researches, and/or teach population education effectively through the provision of pre-service and in-service training,

(iii) To ensure the continuous improvement of the regional population education programme through
(iv) To secure the support and co-operation of other agencies with programmes in population education and related activities by establishing linkages with them.

(b) To undertake the adaptation of the secondary school teacher's guides and student's reference materials in population education,

(c) To adapt existing training materials in population education for developing regional training manuals for non-formal education field-workers,

(d) To undertake the adaptation of existing learning education materials in population education for the out-of-school youths and adults, and for vocational secondary school teachers,

(e) To develop and produce supplementary training materials,

(f) To produce and distribute to their intended target clientele the materials adapted/developed by the respective regions,

(g) To provide orientation to regional and division key personnel responsible for planning and implementation of secondary education,

(h) To provide short orientation to principals of both public and private secondary schools in all the regions,

(i) To provide training to division supervisors (Master Trainers), non-formal education supervisors and NFE co-ordinators,

(j) To provide a fellowship for regional educational planners and administrators to study formal and non-formal population education programme in Asia,
(k) To undertake studies to provide baseline data for the development, revision/adaptation and production of curriculum materials and to give direction to training programmes for secondary schools and non-formal education programmes,

(l) To develop monitoring and evaluation designs and instruments at the national level,

(m) To develop prototype achievement tests in population education for secondary school students and assist in its integration into the division/regional achievement tests,

(n) To hold periodic reviews to look into the extent of the implementation of population education in the secondary schools,

(o) To undertake an interim evaluation of the implementation of population education in the Secondary Schools,

(p) To strengthen the resources of the PEP library through procurement and acquisition of books and other materials in population education and related fields and through staff development,

(q) To establish a population education documentation unit in each MECS regional office,

(r) To continue the publication of the PEP newsletter to promote continuing exchange of information in population education between and among the PEP and the 13 MECS regions,

The project covered both in-school (mainly secondary) and out-of-school programmes.

The major achievements of the project are as follows.

A) Curriculum and Materials Development

(1) The programme developed a comprehensive scope and sequence organised around the major area of demography,
determinants of population growth, consequenc.es of population growth, human sexuality and reproduction, and planning for the future,

(2) Teacher's guides in population education were developed in both elementary and secondary school levels for social studies, health, mathematics, science, home economics,

(3) Preparation of a population education course syllabus for a three unit course in teacher education, preparation of source book population education for teacher education and also preparation of training materials for elementary and secondary school teachers were completed,

(4) Supplementary reading materials in population education, students reference materials and training modules had been developed,

(5) The programme adapted materials for non-formal population education,

(6) Technical assistance was given to the different regional curriculum development workshops:
   (a) Adaptation/revision of teachers' guides in population education for the secondary level,
   (b) Adaptation of secondary student reference materials in population education,
   (c) Development of supplementary training materials in population,
   (d) Adaptation of curricular materials on population education for NFE teacher co-ordinators,
   (e) Adaptation of learning materials for out-of-school youths and adults.

(7) Two curriculum refinement workshops were conducted. Regional teachers' guides in five subject areas were refined and updated preparatory to reprinting.
B) Orientation/Training

(1) Seventy per cent of elementary school teachers and ten per cent of secondary school teachers had been trained via in-service training programme and pre-service teachers take a three unit one semester course in population education.

(2) Instructors of colleges and universities and instructors of population education in teacher training colleges had been trained.

(3) Textbook writers in population education had been given orientation and an orientation seminar was conducted on the wider tryout of the integrated training model in population education.

(4) An orientation seminar for Regional Executive Officers and co-ordinators was conducted.

(5) Orientation seminars had been conducted for key personnel in the regions.

(6) Orientation conferences for secondary school Principals had been organised.

(7) Regional training programmes for divisional trainers, regional training programmes for school based trainers, training of secondary schools and training of vocational school teachers in region had been conducted.

(8) Training programmes in population education for Regional/Divisional Non-formal Education Supervisors and inter-country study visits for PEP and MECSRO personnel to five Asian countries, Indonesia, Malaysia, Thailand, Bangkok and India had been undertaken.
(9) Refinement of training designs in population education was finalised.

(10) The training needs in population education of NFE Regional/Divisional supervisors and NFE District co-ordinators in regions had been assessed.

(11) The development of a training evaluation module has been completed.

(12) Production of Training Modules was completed.

C) Research and Evaluation

The following research and evaluation studies have been conducted.

(1) Analysis of population contents of text books,
(2) Study on the reactions to controversial contents of parents, community leaders and layman and pupils,
(3) Survey of family size preference among Philippines adolescents,
(4) Study of formation of concept, attitudes and values related to population issues,
(5) Consolidation of findings of regional research studies,
(6) Tri-Regional Work Conferences on Research Utilisation in Population Education,
(7) The population education needs of non-formal education field workers and out of school youths and adults,
(8) Impact of population education training on the fertility behaviour of trained elementary school teacher,
(9) Consultancy services was given to the workshop on the preparation of research instruments and design for data collection of the impact study in population education for regions III, IV, V.
(10) Construction of prototype achievement test for secondary students and its adaptation at regional level was conducted.

(11) Interim evaluation of population education in the secondary schools was undertaken.

D) Communication/Information Documentation Support

Regular publication of a newsletter, "PEP Talk" is being undertaken and a network of population education libraries in regions has been established.

Sri Lanka

A Population Education Project "Population Education in Schools" was launched under the Population Education Unit, Ministry of Education, Colombo, Sri Lanka. The duration of the project was from September 1983 to December 1984. The main objectives of the study were

(1) To ensure that the citizens of the future are knowledgeable about the impact of population growth and distribution on the quality of life of the individual in particular and the nation in general,

(2) To promote in the citizens of the future, responsible attitudes and informed decision making with regard to issues of family size, population growth and distribution,

(3) To enable students from grades VI to X to acquire better awareness and knowledge about population problems and issues through the development and use of supplementary reading materials in population education,
(4) To help ensure more effective teaching of population education through the development and use of teacher guides and training packages in population education,

(5) To help ensure more effective teaching of population education through the development and use of teacher guides and training packages in population education,

(6) To provide teachers sufficient resource materials on population related topics by making the handbook on population education available to them,

(7) To equip in-service advisers with competencies in population education through an intensive training workshop,

(8) To train at least the teacher of science and one of social studies from each school to teach population education with confidence through study circles conducted by in-service advisers,

(9) To provide orientation in population education to Regional Directors of Education to ensure smooth implementation of population education in the schools, as well as in facilitating the use of teachers trained in population education to serve as resource speakers at Parent-Teacher Association meetings,

(10) To strengthen the teaching of population education in pre-service teacher education by providing a three-day training programme in population related topics through the provision of a mobile library service on the education regions,

(11) To conduct a comprehensive study on the impact of population education programme on the knowledge and attitudes of students and teachers,

The project covered only in-school population education programmes. The study reveals the major achievements of the
project that supplementary readers have been developed for students from grades VI to X for integration in social studies and science. A teacher's handbook in population education was developed. Preparation of curriculum, scope and sequence for grades VI to X has been completed. A national source book in population education was developed. Orientation seminar/workshop on population education was conducted for Regional Directors of Education and Chief Education Officers. Briefing of in-service advisers in science and social studies had been undertaken. Training of one teacher from each school was done. Mobile libraries were organised to provide information support to population education activities in the education regions.

Thailand

Department of curriculum and Instructional Development, Ministry of Education, Bangkok, Thailand, undertook a project "Development and Implementation of Population Education". The duration of the project was from 1979 to 1985. The following are the objectives of the project:

(1) To help Thai people to make critical and rational decisions pertaining to population and family planning matter, contributing to the Government's effort to cut down the rapid rate of population increase,

(2) To ensure that elementary and secondary school pupils have access to adequate supplementary reading materials in population education,
(3) To make available at least a set of teacher's manual, lesson plans and teaching and learning packages in population education to each school in the country, and a set of training package to each adult education worker,

(4) To ensure the involvement and commitment of key leaders and school administrators to population education through orientation seminars at the national, regional and provincial levels,

(5) To provide training in population education to at least one representative from each elementary school group in the country, as well as to at least one teacher from each secondary and vocational school,

(6) To provide extension workers with training in population education,

(7) To ensure that all teachers and other personnel in adult and community centres have access to tour round sets, tri-monthly news letters and monthly wall newspapers in population education,

(8) To strengthen all agencies working directly in population education through study tours.

The project covered both in-school and out-of-school programmes. The study reveals that population education is integrated in Life Experience Course at the Primary Level (grades I - VI) and in social studies in grades VII to XI in the secondary level. A separate unit on population education has been introduced (grades V and VI). Most of the Teacher Training Colleges after one-semester required course for home economics teachers and as an elective course for other majors both for the elementary and secondary teachers. A teacher's guide for teaching population education in Life
Experience Course, Supplementary Readers for elementary and secondary school students, Teaching-learning package, training manual, Video Cassettes, charts and posters for the use in the training of non-formal adult education workers had been developed. Production of radio programmes for both in-school and out-of-school and production of video programmes on population problems related to traffic, theft and robbery had been completed. Orientation seminars for key population education personnel i.e. school supervisors and administrators, non-formal educators and teacher educators, training of lower secondary school teachers, and training of non-formal education teachers and extension workers had been conducted. The programme organised a population education library/collection which backstops information needs of population education activities. Regular production of a quarterly newspaper and wall magazines paper are being undertaken. Production of a set of posters had been completed. The programme translated and adapted UNESCO's slide-tape "Introducing Demography on Population Education".

Socialist Republic of Viet Nam

The Population Education Research Project "Population Education in the Formal and Complementary Education System" was undertaken by Department of International Co-operation, Ministry of Education, Hanoi, Socialist Republic of Viet Nam. The duration of the course was 1984-1987. The objectives of the project are as follows:
(a) To contribute to the realisation of the population policy, i.e. to create awareness, understanding and support to efforts to reduce population growth rate and to redistribute the country's population,

(b) To develop in the target audiences an insight into the inter-relationship between population growth and the process of social and economic development at the individual, family, community, national and international levels,

(c) To develop desirable attitudes and behaviour in the teachers/field workers, student and the community at large towards population issues so that they could take rational decisions for achieving population policy goals and the desirable level of quality of life,

(d) To institutionalise population education in the educational programme of the Ministry of Education,

(e) To ensure effective teaching of population education in the kindergarten, primary and secondary schools, by integrating population education in the curricula and student materials, and in the in-service and pre-service training of teachers,

(f) To ensure the integration of population education in the complementary education (non-formal education) programmes of the Ministry of Education by developing appropriate curricula, teaching learning and training materials for use by the trainers, field workers and adult learners,

(g) To train project personnel through the attachment programme in other countries within the region,

(h) To provide in-country training for trainers, kindergarten teachers, primary and secondary school teachers during the pilot phase and trainers,
(i) To provide in-country training to trainers, field workers and their supervisors in the complementary education programme,

(j) To organise inter-province study visits for provincial project staff,

(k) To provide short orientation training to educational administrators, text book writers, and other key personnel responsible for complementary and school education programmes throughout the country,

(l) To provide training and teaching learning materials for use by the trainers, teachers/field workers, adult learners and kindergarten, primary and secondary school students,

(m) To pilot test the population education curricula and teaching learning and training materials on adult learner groups and students at the kindergarten, primary and secondary school levels in two selected provinces of Thai Bin and Long An and Hanoi city,

(n) To evaluate the trial outcomes, modify teaching-learning and training materials if necessary and to launch a comprehensive population education in the formal and non-formal education sectors,

(o) To ensure the flow of population education materials within the country by strengthening the national documentation and clearing house to be set up at the National Institute of Educational Science,

(p) To study the impact of the programme on its beneficiaries,

(q) To review the progress of the project through Project Progress Review, Tripartite Review, Annual Reviews and a final evaluation towards the end of the project.

The project covered both in-school and out-of-school programmes.
The major achievements of the project are under the following heads:

A - Curriculum and Material Development - Curriculum materials for primary and secondary schools, for complementary education, for teacher training and for kindergarten were developed and development of a population education hand book for use in teaching and training was completed.

B - Orientation/Training - Orientation of high level of officials was undertaken through an inter-country study tour. Intensive national training works to develop a core of trained personnel in population education, a national workshop on curriculum development for primary and secondary schools, for teacher training, for complementary education, for kindergarten education were conducted. Personnel were sent for attachment to India's Population Education Programme.

C - Research and Evaluation - An analysis of curricula and text books to identify entry points for population education has been completed and a survey of knowledge, attitude and behaviour on population education has been conducted.

D - Communication/Information Documentation Support - A population education clearing house was established at the National Institute of Educational Science. Books and materials are being purchased to build population education collections in five centres.
Studies of Population Education in India

On the themes relating to population education, a number of research studies have been undertaken in India. The book "Researches on Population Education" published by UNESCO, presents some of the research studies conducted recently.

In 1976, Dr. D. Gopal Rao, NCERT, had undertaken a study entitled "A study of the Awareness of Teachers on Population Problems and Their Reactions to the Introduction of Population Education in Schools" in order to find out (i) the perception of awareness of teachers towards population problems, (ii) to find out their reaction to the introduction of population education in schools, and to find out their opinion about the content and methodology of introducing population education. For this study, a random sample of 500 teachers were drawn from 10 schools of Delhi and questionnaire was used as the instrument of data collection. The study indicates that most of the teachers had a good knowledge of the causes and consequences of over population. This indicates their favourable attitude towards the introduction of population education and necessity of introducing the same as an integral component of school curriculum on compulsory basis. This study also highlighted teaching of sex education in schools. This study has a very good influence on the introduction of population education in the school curriculum. This study established that for developing curriculum in Population Education, it is necessary to collect the views of the
Korean Educational Development Institute, Seoul, conducted a research study on "Approaches to Curriculum Organisation for Population Education" in the year 1975 with the objectives to identify specific methods and criteria for organising population education, and to develop conceptual structure of population education analysing the existing curricula. For this, the sample of 31 generalisations comprising the conceptual structure of population education divided into six content areas - human reproduction and family planning, family size and standard of living, population and environment, population and economy, population policies and programmes and the effects of the population phenomenon on human life. The study reveals that all the contents were not equally preferred. Among all the subjects, social studies covers population knowledge sufficiently.

The Central Education Research Institute, Seoul, in the year 1981 conducted a research project as "Project on Curriculum Improvements for Population Education in the Elementary and Secondary Schools of Republic of Korea" with the objectives such as to analyse and review topics related to population issues in elementary and secondary school textbooks, and to select materials there of and to organise them by each level. For this study, samples of 210 volumes of elementary and secondary school textbook on all school subjects were taken and content analysis was done to identify all topics related to population problems. The major findings of this study are that only a small portion (0.37 per cent)
covers subject matters on population problems of school text books. Social studies contain the largest percentage of topic concerning population problems. The most popular topics are on the category of "the facts of population phenomena", but the topics on population problems are treated more systematically in text books in higher grades though objectives are recommended for Primary, Middle and Higher level. This study is more similar to the aspects of curriculum development of population education to the present study. More topics on population related materials should be integrated in all the school subjects.

A research project "Developing a curriculum in Population Education for Secondary Teachers under Training" was undertaken by Rasmin Thakore of Gujrat University in the year 1979 to develop a curriculum in population education for secondary teachers under training and to evaluate the effectiveness of the curriculum in the normal setting of a secondary teachers training colleges. For this study, a sample of 200 teachers trainees of the Secondary School Teachers Training College, Ahmedabad were selected and data were collected from the curriculum model covering 10 content areas of knowledge on different aspects of population together with different co-curricular activities reflecting the message of population education. Though the study was mainly concerned with developing a curriculum, it reflects the method of implementing the programme. The ten topics included in the model could be taught in 20 periods of 40 minutes each, thus covering each topic in two periods. It also revealed that another 10 periods
are required for imparting the message through co-curricular activities. Thus, the programme can be covered in 30 periods of 40 minutes duration spread over in an academic year.

In the year 1980, the Project Population Education Programmes was initiated by the Ministry of Education, Govt. of India. The NCERT was the executing and co-ordinating agency at the national level. At the State level, SCERTs/SIEs were the co-ordinating agencies. UNFPA was the major finding agency. The project was in operation through a net work of graded institutions functioning at different levels. The first phase project was completed in the year 1985 and the 2nd phase is in operation at present. The objectives of the project were

- To gear the entire educational system in the country to the realisation of the potentialities of the role in the developmental efforts of the country and the inter-relationship between the population education and quality of life at the micro and macro levels,

- To make the students and the teachers aware of the population issues in the country and the target and effort of the Govt. of India in solving the problems,
To develop desirable attitude and behaviour among the teachers, students and community members towards population issues, family size and quality of life,

- To establish Population Education Cell at national and State levels with adequate facilities for the implementation of the programme,

- To help the states to develop curriculum, instructional materials, Training packages, Newsletter, including Lessons for Radio and T.V.,

- To train personnel for different levels of education including administrators, planners and policy makers to conduct research on the impact of the population education on the attitude formation and behavioural pattern of students in formal and non-formal types of education,

- To initiate and promote population education for the out-of-school children of the age group 6-14 in the non-formal education sectors.

The project covered both in school and out of school population. In school, population covered the primary, secondary and teacher education programme whereas the out of school covered the children of 9-14 age group.

Among the achievements, the following are worth mentioning.

1. Out of thirty two States and Union Territories, twenty eight (87.5%) joined this project. In twenty six states and Union Territories, population education cells were established. In twenty one states and Union Territories, population education contents were integrated in the ongoing syllabi for the school stage i.e., primary, middle and secondary.
About 72.01 million (66.01% of the total student population) were exposed to population education. Few states and Boards of school education took the decision to earmark some percentage of questions and marks exclusively for population education in their public examinations. All these established that the objective of institutionalizing the population education was achieved.

2. Curriculum and material production being the other important objective was achieved in the most of the states and Union Territories. In twenty five states and Union territories, population education syllabuses were developed for primary, middle and secondary stages. In seventeen text books, lessons were incorporated to the text books at various levels. Radio and T.V. scripts were developed. In fourteen States, population education curricula for elementary teacher education programme was developed. Instructional materials for teachers and functionaries were developed in seventeen States. Twelve states have developed training packages for teachers training. The NCERT produced text books, audiovisual packages etc. for the use of different levels. Nearly thirty eight titles at the national level and 300 titles at the State levels of instructional materials for different age groups.

3. As regards the orientation and training of the teachers, programmes at different levels for different types of personnel, elementary, secondary teachers, supervisors, administrators, text book authors were organised. The most interesting achievement was the introduction of population
education in B.Ed., M.Ed. and M.A. in education courses of thirty four Universities.

4. To facilitate communication, information and documentation support, population education collection/library were organised at the NCERT and State Population Education Cell Levels.

In 1974, S. Alosius, M.Ed. of Bangalore University, for his Masters Thesis undertook a research project entitled "A Comparative Study of the Opinion of Parents and Adolescents Towards the Introduction of Sex Education in Schools" to find the opinion of parents and adolescents towards the introduction of sex education in schools. On random sampling basis, 110 adolescent students from different high schools of Bangalore and their parents were included in the sample. Opinionnaire on sex education on the pattern of sex education on the pattern of Thurstone method of attitude scale construction was accepted as the means for data collection and analysis technique. The study reveals that both the teachers and adolescents had a favourable attitude to the introduction of sex education in schools and the christian parents were better disposed to sex education than Hindus or Muslims.

"A Study of the Knowledge and Attitude of Teachers Towards the Introduction of Population Education in School Curricula" was conducted by N.N. Srivastava, Bhopal University in 1973 to study the awareness of school teachers towards population problems in the country, their attitude towards the introduction of population education in school curricula
and also to find out some possible content to be included in the school curricula on the basis of opinion of teachers regarding the ways and means of introducing population education in schools. A random purposive sampling of 300 teachers from the districts of Rewa and Bhopal, in Madhya Pradesh belonging to different types of schools, Questionnaire and an attitude scale using a combination of Thurstone and Likert method were developed. The study reveals that the majority of the teachers were aware of the population problem which lead to unemployment, under-employment and low standard of living. So they felt that if the growth of population is not checked, the economic standard of the country will be deteriorated, thus the best way of checking over population is by educating the younger generation. All were in favour of having small family. Population education should form a part of school education and in integration with existing school subjects especially through the social studies course and the course should be a subject for annual examination.

N.V. Vaswani and Indira Kapoor had undertaken a study entitled "School Teachers Attitude Towards Population Education, in Family Welfare Training and Research Centre", Bombay, 1977, with a purpose to study the teacher's attitude towards teaching of population education in schools and their views of teaching it as an integrated subject or a special subject and also to find out their attitude towards age of marriage and family size. A random sample of 405 teachers was selected for the purpose and a questionnaire was administered. The study reveals that only 3 per cent people could define population education properly
but after getting sufficient instruction on this, 75 per cent would feel it necessary to be introduced in school curricula. 42.2 per cent were in favour of integrating it with other school subject whereas 8.7 favoured for the introduction of a separate subject. The level at which population education should be given was a controversial issue as 26.6 per cent found it necessary before Class VIII whereas 44 per cent opined against this. This study limited to a specific area so it could not generalise the facts as necessary.

G. Prabhakar of Bangalore University in his Master's Study in year 1975 had undertaken a research project "A Study of the Opinion of Students of a Few Secondary Schools of Bangalore City Towards the Introduction of Population Education at the Secondary School Level" to collect information relating to the opinion of both boys and girls of different school with different religious beliefs towards the introduction of population education. Three hundred male and female secondary school students belonging to different age groups, religion and type of school were drawn on the basis of purposive sampling. Verbal response of agreement or disagreement to different statements or developed on the lines of Likert's Summated rating scale was prepared for the data collection. The study reveals that the students both boys and girls of each age group, from each type of school, from all religious backgrounds favoured the introduction of population education at the secondary school level.
In the year 1974, Kalyana R. Salkar conducted a study entitled "A Study of Population Awareness Among School Students in Goa (standard VII to XI) as well as Teachers and Parents and Their Reactions to the Inclusion of Population Education in the School Curriculum". The main objectives of the study are to assess the degree of population awareness among Goan children, their teachers and parents and to find out their preparedness for the inclusion of population education in the school programme and to understand their views about the ways and means of introducing the population education in the school system (Standard VII-XI). For this purpose, random sampling of 5 per cent of student population from Standard VII to XI, Tulukas of Goa District, 15 per cent of the middle and secondary teachers and 200 parents from different socio-economic strata covering all the 11 Tulukas of Goa District was taken. Questionnaires for students, teachers and parents were prepared for data collection. The study reveals that students, teachers and parents all are very much conscious about the population problems and are in favour of introducing it in their curriculum. But the most important point was that teacher training facilities must be available for the teachers. This study highlighted the importance of introducing population education at each level of education.

By 1969 Population Education Programme in Dhaka had undertaken a study entitled "A study of Knowledge and Attitude Towards Population Education and Practice of Family Planning". 
of Teacher" under Ministry of Education and Religious Affairs (Educational Division). The main objective of the study was to assess the attitude of teachers towards population issues and population education programme. Prior to their exposure to the training and subsequent class room teaching and to assess their opinion on various aspects of family planning programme, stratified random sampling for selecting teachers i.e. 261 teachers from Primary Schools, 344 from Secondary and 184 teachers from colleges was adopted. Questionnaire, attitude test and opinionnaire were used for collecting information. The most important findings of this study were

- the mean score of the three groups indicated that the knowledge regarding population education was very low but all these three groups have favourable attitude towards the same,
- college teachers having small family size, had more favourable attitude towards population issues,
- teachers at all levels were conscious about the severe consequences of rapid population growth in Bangladesh,
- Secondary teachers were the least enthusiastic for family planning,
- majority of the teachers desired to introduce population education in school curriculum.

This study indicates the attitude of teachers towards population education. But it ignores whether specific course is to be provided to the teachers on population education or not.
Another study was also undertaken entitled "A study of the Attitude of Teachers towards Different Aspects of Population Problems" in 1970 by P.V. Varghese, a M.Ed. student at Bangalore University, India to find the attitude towards different aspects of population problems. For this purpose, 276 teachers drawn from Primary and High School Levels constituted the sample on stratified random sampling basis. A four-point attitude scale to find the attitude of teacher towards population education, sex education and family planning was constructed for data collection. The most important findings of this study are: The primary and high school teachers both male and female differed in their attitude towards population education and also sex education. Whereas the religion of teachers was significantly related to their attitude to family planning and sex education.

In 1970, a project entitled "A Study of the Views of Teachers on Birth Planning" was undertaken by Pohlman, Edward and K. Seshagiri Rao, Central Institute of Family Planning, New Delhi, India to find out teachers perception of the different aspects of population problems. A sample of 832 male and female teachers from elementary and secondary schools in rural and urban areas of Delhi and Haryana state, was selected. Questionnaire and interview were accepted as the means for collecting data on the inclusion of the topics like Over-population in India, Need for small families, How the human child is conceived and Family Planning etc. The most important findings is that the teachers realised the population problem and believed that mere propaganda would not serve the purpose,
the poor people should know that the causes of poverty are only due to overpopulation and topics like human reproduction system and family planning should be taught at University level and population education should be divorced from sex education.

In 1971, a research project entitled "Population Learning Among Secondary School Students in an Indian Village" was undertaken by Thomas Poffenberger of University of Baroda, to find out the perception and knowledge of the secondary school students about population problems. To achieve the objective, 100 students of grade XI (average age 17) of a village secondary school in Baroda District of Gujrat State, were included in the sample, Survey method involving questionnaire and interview was used for data collection. The major findings of the study are that the village secondary school students were aware of the population problem. They gained this knowledge through the mass media, particularly newspapers and extension education efforts of the family planning programme such as film shows, exhibitions and the visits of family planning workers to homes. The students opined in favour of a small family and this was mainly prompted by the difficulty experienced by their parents in rearing a large family.

The research project "An Experimental Study in Correlated Teaching of Population Education in a Secondary School" was a Masters Thesis of K.O. Parikh, M.S, University of Baroda, India in the year 1972 to determine whether the experimental teaching of population education affects the attitudes, knowledge and understanding of the school children
of standard X towards population problems and family size. A sample of 200 boys and girls students of standard X from two schools of Baroda was selected. Pre-tests and Post-tests were conducted to collect data. The study reveals that there was a positively significant difference in knowledge and understanding about population issues after the teaching of population education, and there was a positively significant difference in attitude towards the population issues after the teaching of population education.

In 1972, J.R. Maheswari, M.Ed. student, had undertaken a project entitled "A Study of the Receptiveness of School Teachers to Population Education in Jamia Islamia University, 1972 to study the teachers' awareness towards population problems and opinion towards the adoption of small family norm and to find out their interest for introducing and incorporating population education in school curricula. The samples were choosen on simple random sampling basis and questionnaire was the basis for collecting necessary information. The study reveals that the teachers were very much aware about the population problem and about 92 per cent opined unemployment and poor standard of living as the main cause of over population. So eighty per cent agreed that a small family having two sons and one daughter is advantageous. But there was a controversy among the teachers regarding the effectiveness of population education at school level because many teachers felt it necessary for adults. Different topics related to population issues might be included in the course but a majority of teachers favoured the idea of integrating this concepts with existing school subjects.
This study is very important so far as the present study is concerned in the sense that it highlighted the teachers' awareness, attitude and preparedness in respect to population education.

Central Education Research Institutes, Seoul, had undertaken a study entitled "Curriculum Development for Population Education in Social Studies through grades I to III" in 1972 to analyse trial text books and related text books materials in social studies in Grade I to III as basis in the development of text books and teachers guide and to pre-test, the teacher's guide developed in a workshop. For this study, trial text books of social studies and related text books of social studies and related text books materials for grades I - III in elementary schools were the subject of analysis. The study also tried out to develop teacher's guide on one of the designed experimental school. The whole study included analysis of text books and revised curriculum, a workshop to develop the revised materials and trial of these developed materials. The most important findings are the content of population education to be integrated in social studies through grades and the teacher's guide for the grades I - III was developed with the co-operation of the text books compilers and authors. Though this study is not comprehensive one, it has little effect on the present study.

In 1973, a project entitled "A Knowledge of School Teachers about Family Planning and Their Reaction to Population Education Curriculum" was undertaken by Shailabala Dayal, National Institute of Family Welfare, New Delhi, Social Research Division to seek information regarding teachers' knowledge, practice and
approval of family planning and to find out their reactions to the population education curriculum. This was published in Journal of Family Welfare, Vol. 17, no. 3. 98 teachers of (71 male and 27 female) B.Ed. correspondence course of Delhi University for the session 1970-71 formed the sample. Nearly 53 per cent of the sample were married. Questionnaire consisting of 24 items was the technique for the collection of data. The major findings of this study were (1) a majority of male as well as female teachers favoured a two to four years interval between two births, (2) about 75 per cent thought it desirable to use methods to prevent unwanted pregnancies, (3) all female married teachers approved the use of family planning methods only after one or two children, (4) 65 per cent were in favour of introducing the concept of a small family in high school classes whereas it was considered to be necessary for students at the elementary level, by 24 per cent of respondents. (5) While 55 per cent recommended the teaching of trends in population growth, birth and migration be taught at the high school level, only six per cent thought it suitable for the elementary level and seventeen per cent thought it suitable for the middle school level. (6) Most of respondents recommended that concept like Government policy and Programme of population control, physiology of human reproduction could be taught at the higher secondary level, (7) mostly, they recommended to accept integrated approach to introduce this concept in the school curriculum.

In 1982, a study entitled "Knowledge and Attitude Survey on Population Education" was conducted in Curriculum Development Centre, Tribhuban University, Kathmandu to determine
the knowledge and attitude of both teachers and students of Tribhuvan University regarding population education. One hundred and fifty students from all levels and 50 university teachers on random sampling basis were selected for the purpose. Two questionnaires - one for teacher and another for students were administered to collect data. The study reveals that they all were aware of the population phenomena and realised that a controlled growth is desirable for the country i.e. having the family size with two/three children. In contrast with teachers, the students found population education a popular subject and favoured its integration into existing curricular in higher education. Both agreed that the main objective of population education is to promote responsible parenthood but a large number thought that population education is the same as family planning/sex education and family planning. This study clearly states that they were not clear about scope of population education for which they gave an overall view regarding this concept.

In 1980, in Dhaka "a Study of Knowledge and Attitude Towards Population Problems, Issues and Population Education at Different level of Students" was conducted by Ministry of Education and Religious Affairs (Education Division), Population Education Programme to assess the level of knowledge and attitude of the students of Classes IV to XIV on population facts and related problems prior to their exposure to classroom teaching in population education. For this study, stratified random sampling was done for selecting samples. Data were collected through questionnaire. The study reveals that students of higher classes had good knowledge regarding this population issues than
the others and girls had more favourable attitude than the boys.

In year 1975 of Baroda University, R.A.Rabinson, had undertaken a research project entitled "Effect of Teaching Population Education in the Population Awareness of Students of Standard VII", to find out the effects of teaching population education on the awareness of the students regarding population problems and the difference in achievement of the students according to their sex, family size and parents education. A purposive sample of 27 students of standard VII of Central School, Baroda was selected for the purpose. Data were collected from a single group experimental design giving a short answer objective type-pretest and post-test and a check list. The major findings of the study are that there is significant difference between the achievement of the students from pre-test to post-test. 81.4 per cent of the students were found interested in learning about population education where as 66 per cent did not want to learn about sex and family planning. The teachers also realised the utility of accepting population education for class VII students but not in favour of giving knowledge of sex and family planning to the students.

A project entitled "A Survey on the Secondary School Teachers' Knowledge and Attitude Towards Population Problems" was undertaken by Young Horn Park and others, Education Research Institute, Seoul National University, Seoul in 1975 in order to measure teachers' awareness of population problem such as the population phenomena, the consequences of population increase and the need for population education and specifically, to
explore

a) How the secondary school teachers perceive the seriousness of current population problem,
b) What their attitudes are towards population control, and population education,
c) Whether they know enough about major facts, concepts, principles and theories of population matters,
d) What their opinions are about the current practices of population education.

2,062 secondary school teachers representing three per cent of the total teacher population and two hundred and thirty schools were selected on the basis of stratified random and cluster sampling. Questionnaire containing 20 items on awareness of population problems and 48 questions on measurement of teachers' attitudes in the form of Likert-type items was developed to achieve the objectives desired. Techniques for analysis used include chi-square values, contingency co-efficients, frequencies and percentages. The study reveals that high school teachers as a whole were highly aware of the importance and seriousness of population problems in comparison to catholic teachers. But they were not very clear about demographic concepts where as the teachers in social sciences and physical education generally had more knowledge in this respect. They pointed out, they did not get good and systematic materials in this regard, even the high school text book did not contain such materials.
In 1974, Ganesh Lal Mehta had undertaken a project entitled "A Study of the Opinion of Parents and Teachers Towards Introduction of Population Education in High Schools of Bhubaneswar, Orissa" to find out the opinion of teachers and parents towards the inclusion of certain contents of population education in high school curricula, importance of population education in various spheres of social life, the suitability of school as a proper agency for teaching population education and their opinion towards the study of sex differences.

A random sample of 200 teachers (50 male and 150 female) and schools of Bhubaneswar city was selected. The study was restricted to parents of children studying classes IX & X only. Opinionnaire was prepared with 46 items to collect necessary information. The study highlighted that the teachers and parents irrespective of their sex and education background had a favourable opinion towards the inclusion of population content in the education programme such as demographic concepts, economic and social consciousness of population growth and the process of human reproduction in the curriculum opposing teaching human reproduction in school. The teachers and parents of high income group had more favourable attitude towards small family size than the lower income group. Teachers did not agree with the concept of a small family which is achievable through population education when the parents were optimistic. This study only focuses on the views of teachers and parents of different income groups.
In 1974, S.L. Magda and others of Population Study Centre, Sri Venkateswara University, Tirupati, India, had undertaken a research project on "A Study of the Opinion of Teachers Towards Population Education", to find out the existing knowledge and attitude of teachers towards population related problems. For this purpose, 100 teachers of Chittor district were selected and questionnaire was used to collect data. The major findings of this project are that most of the respondents knew the concept of population where as some equated the term with family planning/population awareness. Almost all realised the very problems caused due to over growth of population. So they were in favour of having a small family consisting of two/three children. They highlighted one important fact that late marriage is one of the methods of controlling family size. Mass campaign should be made for creating population awareness among the community.