AN OVERVIEW OF TEACHER EDUCATION IN KERALA

Chapter - II

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2.1. Scenario of Teacher Education

2.2. Expenditure on Teacher Education

2.3. Taxonomy of the Cost of Education
CHAPTER-II

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Teacher education is the subsystem of the larger system of education in any nation. The scenario of teacher education in the country to a certain extent reflects the nature of its education system. The total outline and the expenditure incurred on it indicates the strength and competence of the teacher education system without which the main system of education cannot be improved.

The present study is a humble attempt to investigate into the aspects of the cost of teacher education in the state of Kerala. Therefore it is essential to present a factual picture of the system in the national context. The first section of this chapter is devoted to presenting the teacher education scenario and discussing certain problems related to it especially from the economic point of view. The second section deals with the now prevalent taxonomy of cost of education, which has been used in this study.
2.1. Scenario of Teacher Education

Teacher education in India has been treading the same road for over one hundred and fifty years. That road has reached a dead end from several points of view. Teachers coming out of the system often find themselves incapable of taking care of "learning how to learn", value-oriented education, and development of higher mental abilities such as problem solving, critical thinking, analysis and synthesis, etc. that are essential for a learning society.

For meeting the varying learning needs, teacher has to recognise the sovereignty of the learner, which has not been a concern of teachers so far, as the certification of the learning is carried out by external examining bodies through public examinations. Besides recent developments in information and communication technologies require that teachers be information and communication technology literate for using with facility digital learning resources and are able to integrate use of information and communication technology in classroom learning activities. Employment opportunities are now increasingly shifting to the
private schools and even foreign governments are looking for Indian teachers for their schools. Therefore, the question is whether we must still pursue the same practice or design and engineer a new road investing more money.

Sri Aurobindo in his great book *A National System of Education* emphasised that purpose of education is not mastery of subject alone but development and chiselling of mental faculties. Consequent on the explosion of information technology, increasing relevance of education to all domains of the world of work, increasing stress on the themes of unity and integration, international understanding and peace, individual and collective excellence, new demands are being made on the teacher. The role of the teacher as a taskmaster is fading out of the educational scene and he is being increasingly looked upon as a guide and an inspirer. In addition, the teacher is expected to contribute to integrating education with development, be an innovator and inventor of dynamic methods of education, be able to impart value-oriented
education and be a leading agent of change in shaping a learning society.

Role of Teacher

In the changed context, the teacher has to play a major role in implementing the policies and schemes formulated to achieve a breakthrough in the quantitative expansion and qualitative improvement of education, which is highly essential for the national development. The National Policy on Education 1986 called for a substantial improvement of the condition of work of the teacher and the quality of teacher education. This fact should be recognised and teachers with high moral and intellectual capabilities are to be attracted to the profession. No doubt, the quality of education depends upon the teachers. In fact the quality of teachers depends upon the training they receive during their pre-service teacher training periods. In other words the quality of teachers largely depends upon the education programme, selection procedure followed for the admission of the trainees, instructional materials and evaluation of their performance. The best and the only way of
ensuring such quality of education in India is by developing professionalism in teaching.

Teachers should play a constructive role in refreshing the present educational system. Educational institutions should be given necessary encouragement for conducting new experiments in teaching methods, formulation of courses and preparation of textbooks etc.

Objectives of Teacher Education Programmes

In order to plan teacher education curriculum and training strategies, it is necessary to recall the multi-dimensional nature of the teacher's roles and functions:

- Organise learning resources
- Plan effective curriculum transaction strategies
- Conduct interactive classroom teaching
- Evaluate outcomes of learning
- Implement compensatory education programmes
- Cater to special needs of disabled children
Organise and guide a variety of co-ordination activities
Train students in problem solving
Participate in complementary education
Develop in student's qualities of democratic citizenship and promote environmental consciousness
Organise and participate in programmes of community service and development

Vision for Teacher Education for a New India

India is the second most populated nation in the world. Recently, its population crossed one billion mark. There are about 300 million children in the school age group. The challenge is to enable them through education for living effectively in a world, which is getting increasingly fragmented between developing and developed countries and is advantageous to those who are literate and are able to cope with life style dominated by advances in science and technology. Therefore, education has to be contextual and at the same time has to have a global perspective as the children would
grow up not only into citizens of this country but at the same time will belong to a global society.

As changes in science and technology are frequent and unpredictable it is not possible to envisage what the nature of occupations will be in the years to come. We, therefore, cannot anticipate today's skills and abilities that children would need for living effectively for their full span of adult life in next decades. The vocational skills learnt for present occupations will get out of date before long. Therefore, the vocational situation that prevailed during most of the 20th century will not hold now. It would now be necessary that the young persons be prepared right from the beginning as life long learners. Children of today when they grow up will have to continually update themselves with the new technologies and the changing nature of occupations. It is in such a context the emphasis of learning at the school level will require a shift from being teacher-centred to learner-centred. The principal task of teachers will be to enable children with the ability of learning how to learn, for which, it would be necessary that teachers
recognise the autonomy of learners and reorganise teaching-learning around using human brain for developing thinking skills rather than using the brain for storing information.

The changed scenario of teaching-learning will entail radical changes in teacher education. The teacher education programmes that are followed throughout the length and breadth of the country have remained static both in form and content for over 100 years. The pedagogy which was introduced in the latter part of the 19th century, relevant to the society then, has continued in its unchanged form not only throughout the 20th century, but even now.

**Structure of Educational System**

The *Sixth All India Educational Survey* published by National Council of Education and Research Training, New Delhi (1999) has revealed that in 1993 there were 905,900 schools and 4,197,555 teachers.

Education in India generally follows 10+2+3 structure. The 10+2 years form the school stage. The first ten years of schooling is used for giving a common undifferentiated general education. The
national pattern envisages the first five years form the Primary stage, the next three years the Upper Primary stage, which are followed by two years of Secondary stage and two years of Senior Secondary stage. The school stage is followed by the 3-year tertiary stage.

In 1986 a national system of education was adopted for the first ten years of school education. It is based on a national curricular framework. It contains a common core along with components that are flexible. The common core includes the history of India's freedom movement; the constitutional obligations and such other contents as are essential to nurture national identity. These elements cut across subject areas and promote values such as India's common cultural heritage, egalitarianism, democracy, secularism, equality of sexes, protection of environment, removal of social barriers, observation of small family norm and inculcation of scientific temper.
Teacher Education

It has already been mentioned that the total duration of school education as per the national norms is 12 years. It comprises of 8 years of elementary stage, which is preceded by pre-school, and is followed by four years of secondary stage. Training of teachers for these three broad stages of schooling is provided through stage specific pre-service courses. State Boards of School Education are responsible for conducting examinations and certification of Preschool and Elementary Teacher Education courses. Universities give the Bachelor of Education (B.Ed.) degree for teaching at secondary level.

Teachers' Certification

The Pre-service Teacher Education programmes in India are tied up with common structure of school education. The school structure comprises 8 years of elementary stage followed by 4 years of secondary stage. Courses of teacher education are, therefore, offered stage-wise. Teacher education for the elementary stage is being carried out at about 800 institutions, which offer courses of two-
years duration and are open to candidates who have passed the senior secondary examination at the end of the 12th year of schooling. As the 32-states/union territories have been determining the profile of their elementary education, certificates of teacher education for the elementary stage issued by the State Departments of Education have as many as 28 different names. Some of the names of elementary teacher certificates are BTC (Basic Teaching Certificate), D.Ed (Diploma in Education), TTC (Teachers' Training Certificate), JBT (Junior Basic Training), etc.

Teacher education for the secondary stage is being carried out at about 900 institutions in India. The course commonly called B.Ed. (Bachelor of Education) is generally of one-year duration and is open to graduates. Affiliating universities, which also determine the curriculum, award the B.Ed. degree. As there are more than 200 universities in the country, the course contents of teacher education programmes for the secondary teachers though appear similar are generally different. It should, therefore, only be expected that teacher education programmes in the country have wide diversity.
Teacher Education Institutions in Kerala

There are mainly 2 categories of teacher training institution in kerala. 1) Primary Teacher Training Institutions, which issue certificates called T.T.C. (Teacher Training Certificate). These teachers who are getting trained in these institutions and are qualified for teaching primary classes. The basic qualifications required for admission is high marks in secondary school leaving certificates or a higher secondary pass. 2) Secondary teacher education institutions, which issue Bachelor's degree certificates in education. The students who get high marks in Bachelor's degree / Master's degree are usually admitted to this course. In fact there is a third category of teacher training institutions also, which prepare teachers for teaching languages at primary and secondary schools. These institutions are generally called Language Teacher Training Institutes. The basic qualification required for the course is Bachelor's degree in language or oriental title such as Vidwan, Afzalul ulama (in Arabic), Praveen (in Hindi), Adebe Fazel (in Urdu), etc. In addition to this kerala has Pre-primary Teacher
Training Institutes also for giving training to those who teach the pre-primary children. The basic qualification for admission to this course is high marks in Secondary School Leaving Certificate /a Bachelor's degree.

Secondary Teacher Education

The responsibility for secondary teacher education would continue to rest with colleges of teacher education affiliated to the Universities. At present there are 596 secondary teacher education institutions in India working under different types of management. They organize pre-service education courses for the university graduates to enable them to become secondary school teachers. A centrally sponsored scheme for the improvement of teacher education has been formulated by the Ministry of Human Resource Development (MHRD). Under this scheme, 250 secondary colleges of education are expected to raise their standards so as to develop them into institutions of excellence with increased inputs. The MHRD is providing financial assistance to meet the additional expenditure. Each college will have a teacher’s resource centre for
the in-service and extension programmes in new areas like training in educational technology.

Out of 250 colleges, 50 are being provided with special assistance so that they may develop into Institutes of Advanced Studies in Education (IASE).

**Strengthened Colleges of Teacher Education (CTEs)**

It is visualized that the Colleges of Education if strengthened, will be in a better position to prepare quality teachers for the secondary and higher secondary stages. These institutions will break the dichotomy, which has so far been prevalent between content and pedagogy. It is hoped that there will be an honest effort to ensure the proper development of the teacher not only with regard to subject specialisation but also orienting his personality so as to make him play the role of facilitator of learning. He will also be equipped with the capability of using educational media support for effective teaching and learning. The colleges will ensure the prospective teachers to have substantial training in simulated conditions to develop various skills.
To achieve the mentioned goals, the Colleges of Teacher Education are expected to have a strong Teacher Resource Centre for in-service and extension programmes for school teachers. Gradually, they are supposed to develop continuing education programmes for every secondary school teacher.

The following are visualised as the functions of the strengthened Colleges of Teacher Education.

1. Organising pre-service teacher education courses for graduates to prepare them as secondary school teachers.

2. Organising pre-service teacher education courses for postgraduates to prepare them as secondary level teachers. As the preparation of teachers for the +2 stage has not received adequate attention so far, this function should be given extra emphasis.


4. Providing extensions and other support services for school complexes.
5. Conducting experimentation, research and innovation in school education.

6. Providing training and resource support for the new areas of educational concern, e.g., value oriented education, work experience, environmental education, population education, and educational technology, computer literacy, vocationalisation and science education.

7. Providing support to professional bodies in teacher education.


9. Developing and conducting programmes of community work in teacher education courses.

Institutes of Advanced Study in Education (IASEs)

As regards the Institutes of Advanced Study in Education, it is hoped that after the input of additional assistance these institutes will offer both post-graduate and under graduate programmes at the preservice level and will develop themselves into comprehensive institutions of teacher education offering programmes relevant to
various stages of teacher education. Research, innovations and experimentation on teacher education will be taken up on a priority basis at these centres. Along with the development of content and pedagogy, stress is also laid on developing software for educational purposes.

They are expected to develop rich programmes of continuing education at the elementary and secondary levels. They should also train personnel for preparation of software for educational technology. They will start different types of courses in areas like management, planning, policymaking, extension and technology. They will undertake an advanced study of the theory of education, and conduct fundamental research in addition to applied research.

In addition to the above functions, the IASEs are expected to perform the following functions also:

1. To conduct courses in elementally teacher education for graduates.
2. Preparation of personnel for DIETs.
3. Preparation of teacher educators at the elementary and secondary level.

4. To conduct in-service education courses for elementary and secondary teacher educators.

5. Organizing pilot programmes in teacher education.

6. Conducting advanced level fundamentals and applied research and experimentation in education, especially of an interdisciplinary nature e.g., sociology of education, educational psychology etc.

7. Preparing research workers.

8. Organising training programmes for preparation of software and use of educational technology.

**Academic Staff Colleges for Higher Education**

There are three academic staff colleges in Kerala, one at Calicut University and other at Kerala University and other at Mahatma Gandhi University, Kottayam. They are organising a series of in-service courses for college teachers with a focus on several aspects such as philosophical and sociological foundations of
education, methodology of teaching and evaluation at higher education stage, content upgradation, etc.

State Council of Educational Research and Training (SCERT)

The SCERTs or its equivalent bodies of each state / union territory are required to coordinate pre-service and in-service teacher education programme. The State Council of Educational Research and Training (SCERT), Kerala is an autonomous body entrusted with planning, implementation and evaluation of all academic programmes from pre-school to higher secondary levels. The State Institute of Education (SIE), which functioned as part of the Department of General Education was converted to SCERT in 1999, to give a new thrust and direction to school education in the State.

SCERT is concerned with the academic aspects of school education including formulation of curriculum, preparation of textbooks, teacher's handbooks and teacher training. It advises the Government on policy matters relating to school education.
The various departments/ units carry out the academic activities and programmes of SCERT. SCERT plans and coordinates all academic projects and programmes in the state.

SCERT (Kerala) functions as a research and dissemination institute at the state level by providing guidance, support and assistance to the State Education Department in its endeavour to improve the quality of elementary and secondary education and teacher education. To achieve this goal, the SCERT conducts research studies, develops information systems, curricular policies, and instructional materials and co-ordinates in-service education for teachers at all levels through the District Institutes of Education and Training (DIETs).

Units of SCERT in Kerala:

1. Curriculum, textbooks and evaluation (DCTE):

DCTE is responsible for preparation and revision of curriculum and textbooks, preparation of handbooks for teachers in eight languages and different school subjects for all classes, refresher
courses, orientation and training programmes for teachers, headmasters, DEOs and DDEs on curriculum-related topics.

2. Teacher Education (Pre-Service and In-service) and Extension

Department of Teacher Education (DTE) aims at integrating the training programmes and research programmes with thrust on quality and gives shapes to the changes to be brought in the training courses. DTE's areas of action are organising teacher-training programmes (both in-service and pre-service) for the TTIs and DIETs, orientation courses for teacher educators in TTIs, preparation of evaluation tools for TTC and revision of the TTC curriculum.

3. Department of Educational Technology (DET)

DET's aims are to develop common vision of Educational Technology and its functioning in the Kerala context with the help of experts from the field of information technology, implement information technology education in schools, using computers as a tool for acquiring and using information and knowledge and development of compact disk software for subjects in high school classes.
4. Department of Health, Physical, Art and Vocational Education.

DHPVE is established with a view to cater to academic quality in non-scholastic areas like art, health and physical education.

5. Department of Non-Formal and Continuing Education.

NFE conducts educational programmes for marginalised and out-of-school populations to draw them into the mainstream of education.


Research is a significant input to SCERT’s training programmes. This unit conducts, sponsors and co-ordinates interdisciplinary research with focus on theory, policy relevance, methods and processes of the educational, curricular and training programmes carried out by SCERT. It is also responsible for the evaluation of the massive teacher training programmes, continuous monitoring and assessment of terminal evaluation and field analysis of textbooks. The unit provides empirical and analytical basis for policy and plan formulation and implementation.
7. State Institute of Educational Management and Training (SIEMAT).

SIEMAT provides management training programmes to educational administrators and carries out major research programmes.

**In-service Teacher Education programmes in Kerala**

The programme of mass orientation of schoolteachers (PMOST) was one of the 14 centrally sponsored schemes of the Ministry of Human Resource Development to operationalise the recommendation of NPE 1986. This was a 5-year (1986-1990) programme to orient teachers in the contemporary developments and methodologies of education. Training packages in the form of self-learning modular materials is the major mode of communication in the PMOST. The PMOST is gradually being converted to Operation Backboard programme.

**DPEP (District Primary Educational Programme).**

In-service training is provided to all Primary school teachers as per the District Primary Education Programme guidelines
formulated in April 1993. Since then there have been major developments in the evolution of DPEP as a centrally sponsored scheme. District projects were prepared in 42 districts spread over the seven states of Assam, Haryana, Madhya Pradesh, Karnataka, Maharashtra, Tamil Nadu and Kerala. The planning process in these districts has been intensive and participatory; the process has conflated theory and practice and extensively drawn up organisations like NCERT, NIEPA and Institute of Managements. It would be a truism to say that DPEP planning processes have provided a valuable opportunity to NCERT/NIEPA to field-test many of the pedagogical and management concepts that they have been developing over the years. The studies conducted as a part of the planning process have been of a path breaking nature; and learning levels of over a rigorous sampling and pedagogic design, with a view to identifying area-specific interventions in each of these districts.

In the wake of the experience of the DPEP scheme many of the states have introduced curriculum reforms in pre-service teacher
education for achieving quality in elementary education. Also, there is a palpable concern about the irrelevance of the curriculum of the basic teacher training diploma course that is being followed in the country, particularly when the context of schooling for living effectively in the 21st century has radically changed. The UNESCO document *Learning the Treasure Within* has identified the four pillars of education, *learning to know, learning to do, learning to live together* and *learning to be*. As the world has entered in the information age and is inundated by an unprecedented information explosion, it is being realised that the basic skill to be learnt now is that of learning how to learn, for each person has to develop an attitude of lifelong learning. Many experts in teacher education have given thought for working out strategies for improving the quality of elementary teacher education and for making it contextual.

**District Institutes of Education and Training:** (DIET)

**Mission of DIET:**

The main function of DIET is to provide academic and resource support at the grass root level for the success of various
strategies and programmes being undertaken in the areas of elementary and adult education with special reference to universalisation of primary education and functional literacy in the 15-35 age group.

Role of DIET

1). Excellence in the Institute's own work.

2). Helping elementary and adult education systems in the district in achieving excellence.

Functions of DIET

i). Training

Training and orientation of the following target groups:

a). Elementary school teachers (pre-service and in-service training).

b). Headmasters, heads of school complexes and officers of educational departments.

c). Instructors and supervisors of non-formal and adult education.
d) Members of DBE and village education committee, community leaders etc.

II). Resource support

a) Extension activities and field interactions.

b) Provision of service of a resource and learning centre for teachers and instructors.

c) Development of locally relevant materials, teaching aids, evaluation tools etc.

d) Serving as an evaluation centre for elementary schools and programmes of non formal education/alternative education.

III). Action research

Research and experimentation to deal with specific problem of the district in achieving the objectives in the areas of elementary and adult education is an important task of DIETs. Training received from SCERT should enable the faculty members to conduct action research to solve problems in teaching and extension work in the districts.
The DIET in each district is the nodal centre for coordinating programmes of teacher education. For achieving the objectives of the DPEP, the DIET took the active participation in all intervention. The DIET takes a major role in the effective implementation of all quality improvement programmes in pre-service and in-service. DIETs are functioning as a resource centre for distance education programme. Each DIET has the following departments.

I. Pre-Service Teacher Education (PSTE)

To serve as a nodal agency for the following:

1. (a). Organising pre-service courses for elementary school teachers and to provide academic input to other branches of the DIET.

2. To conduct in-service programmes connected with different subjects.

3. Maintenance of science laboratory, rooms for art education, physical education etc.

4. To provide inputs into programmes of all other branches of the institute.
5. Promotion of and support to co-curricular activities in areas related to the substantive work.

II. Work Experience (WE)

1. To identify locally relevant work experience area.

2. To help the educational authorities to plan the work experience activities in school and Alternative Education Centres.

3. To provide work experience related inputs into all programme and activities of the Institute.

4. To organise activities for cleanliness, upkeep and development of the institute, campus roads, playground, lawns, gardens etc.

5. To organise community service activities and study and visit work centres as part of training etc.

6. To maintain workshop for work experience activities.

III. District Resource Training Unit (DRU):

(1) To assess educational authorities and co-ordinate programmes for Alternative Education/Non-Formal Education.
(2) To conduct orientation programmes for instructors and supervisors of Non-Formal Education/Alternative Education.

(3) To evaluate and monitor the quality and efficiency of training programme of Non-Formal Education/Alternative Education.

(4) To undertake field interaction work vis-à-vis the Alternative Education/Non-Formal Education projects and centres of the district.

(5) To undertake action research making Non-Formal Education/Alternative Education more effective in all areas relevant for its collaboration with other DIET.

IV. In-service programmes, field interaction and innovation coordination branch (IFIC).

(1) To assist additional authorities in planning and co-ordination of in-service education programme for elementary teachers throughout its districts, identify training needs and prepare annual calendar of all programmes to be held in the DIET.

(2) To serve as the nodal branch for organising:

   i. All kinds of in-service programmes.
ii. Orientation programme for resource persons.

iii. In-service education programmes for teachers in the district.

(3) To evaluate and monitor the quality and efficiency of in-service programmes held in and outside the DIET.

(4) To maintain a data base on all persons who undergo training at the institute and to organise follow up programmes.

(5) To serve as a reference and resource centre for teachers.

(6) To act as a nodal branch for all action research and field interaction activities.

V. Curriculum Material Development and Evaluation Branch (CMDE)

1. To adopt existing items and develop new ideas of curricular unit, teaching learning curricular units, techniques for evaluation, question banks, rating scales, observation schedules etc.

2. To undertake testing on a sample basis to assess achievement levels among learners.
3. To help educational authorities and elementary schools NFE/AE Centres implement a system of learner evaluation.

4. To conduct workshops for preparing evaluation tools.

5. To provide Curriculum Material Development and Evaluation related inputs to all other programmes of the DIET.

VI. Educational Technology (ET).

(1) To develop in collaboration with concerned staff of the DIET and other resource persons, sample effective and low cost teaching aids for various subjects relevant to elementary education and teacher education.

(2) To maintain audio-video equipments, computers etc.

(3) To conduct workshops.

(4) To conduct in-service programmes.

(5) To provide Education Technology related inputs with all other programmes of the DIET.

VII. Planning and Management (PM):

(1) To maintain an appropriate database for the district.
(2) To conduct studies with a view to giving policy advice to educational planners.

(3) To provide technical assistance to educational mapping, micro-planning formation of school complexes, institutional planning for schools etc.

(4) To serve as a nodal branch in relation to all programmes of community involvement in basic education.

(5) To conduct appropriate programmes for headmasters, heads of school complex etc. covering areas like leadership, motivation, educational administration etc.

(6) To provide planning and management related inputs to all other branches of DIET.

**Sarva Shiksha Abhiyan**

_Sarva Shiksha Abhiyan (SSA) is an Initiative for Universal Elementary Education_ recently launched by the government. The broad targets of the SSA are that all eligible children will be enrolled in school by 2003; that they will complete five years of schooling by 2007; and
eight years by the 2010. There are many dimensions of the SSA scheme.

But for effective implementation of programmes of teacher education it will be crucial that teacher educators possess professional attributes such as competence and commitment for teaching. The State Governments would have to change their policy of posting secondary school teachers, who generally neither have experience of teaching at the elementary level nor possess professional expertise for teacher education, as teachers in the District Institutes of Education and Training (DIETs) or as faculty in the State Council of Educational Research and Training (SCERT). A separate cadre of teacher educators may have to be created by following the qualifications laid down in the NCTE regulations. For achieving the objectives of the SSA it would be necessary that a network of DIETs, SCERT and IASE be put into place so that these institutions may provide support to each other.
National Council of Educational Research and Training (NCERT)

The National Council of Educational Research and Training (NCERT), established on 1st September 1961, is an autonomous organization registered under the Societies Registration Act 1960.

Role and Functions.

The NCERT functions as an academic adviser to the Ministry of Human Resource Development, Government of India. The main objectives of the NCERT are to assist and advise the Minister of Human Resource Development in implementing policies and major programmes in the field of education, particularly school education. In the formulation and implementation of policies and programmes in school education and teacher-education, the Ministry draws upon the expertise of the NCERT to a considerable extent. The council is fully financed by the Government of India.

Qualitative improvement of school education and teacher education is one of the major concerns of the NCERT. As part of its effort to improve the quality of education, the Council.
1. Conducts, aids, promotes and coordinates researches in all branches of school education:

2. Organises pre-service and in-service training of teachers, mainly at advance level.

3. Organises extension services for institutions, organisations and agencies engaged in educational reconstruction.

4. Develops and experiments with improved educational techniques, practices and innovations.

5. Collects, compiles, processes and disseminates educational information.

6. Assists the State and State-level institutions, organisations and agencies in developing and implementing programmes for qualitative improvement of school education.

7. Collaborates with international organisations like UNESCO, UNICEF, etc. and with national-level educational institutions of other countries.

8. Extends facilities for training and study to educational personnel from other countries, and
9. Serves as the academic secretariat of the National Council for Teacher Education (NCTE), the National Development Group (NGD) for the Asia and the Pacific Programme of Educational Innovation for Development (APEID) and UNESCO.

Programme and activities:

For the realisation of its objectives, the council undertakes the following programmes and activities.

Research:

Being the apex national body for research in school education, the NCERT performs many important functions to organise and support research and to train personnel in educational research.

The different institutes like

(1) National Institute of Education (NIE)

(2) Central Institute of Educational Technology (CIET)

(3) Regional Colleges of Education (RCEs)

These are undertakes programmes of research related to curriculum planning and development, development of instructional materials, child development, educational psychology
and guidance, educational technology, teaching aids, teacher education, educational evaluation, etc.

Besides conducting research itself, the NCERT supports other research programmes by providing financial assistance and academic interaction to individuals and organisations. Assistance is given to scholars for the publication of their Ph.D. theses. The Council also awards Junior and Senior Research Fellowships so that educational problems are investigated and a pool of competent research workers is created. It has a computer terminal for storing, processing and retrieval of data. It also collaborates with international agencies in inter-country research projects.

Development:

Developmental activities in school education constitute an important function of the Council. This function has been further enhanced by the Council’s added responsibility for implementing the National Policy on Education (NPE) – 1986. The Council’s major developmental activities include the developing and renewal of curricula and instructional materials for various levels of school
education and making them relevant to the changing needs of children and society.

**Training:**

An important dimension of the Council's activities is the pre-service and in-service training of teachers at various levels—pre-primary, elementary and secondary and also in such areas as vocational education, guidance and counseling and special education. The pre-service teacher education programmes at the Regional Colleges of Education incorporate some innovative features such as integration of content and methodology of teaching, long-term internship of teacher trainees in the actual classroom setting, and participation of the students and the faculties in community work. Stress is also laid on the training of the key personnel of the states and of state-level institutions, and training of teacher educators and in-service teachers.

The teacher and the quality of his teaching have acquired paramount importance in all the countries of the world.
National Council for Teacher Education (NCTE)

With a view to regulating standards of teacher education in the country the parliament passed an act for establishing a statutory body called the National Council for Teacher Education (NCTE). In 1995 the NCTE act passed by the Parliament received concurrence of the states and for the first time in the country regulation of standards of teacher education became mandatory.

The Council is empowered to frame regulations required for carrying out its regulatory functions.

The act entrusted the following functions to the Council:

"It shall be the duty of the Council to take all such steps as it may think fit for ensuring planned and co-ordinated development of teacher education and for the determination and maintenance of standards of teacher education and for the purposes of performing its functions under this Act, the Council may

(a) undertake surveys and studies relating to various aspects of teacher education and publish the results thereof;
(b) make recommendations to the Central and State Government, Universities, University Grants Commission and recognised institutions in the matter of preparation of suitable plans and programmes in the field of teacher education;
(c) co-ordinate and monitor teacher education and its development in the country;
(d) lay down guidelines in respect of minimum qualifications for a person to be employed as a teacher in schools or in recognised institutions;
(e) lay down norms for any specified category of courses or training in teacher education, including the minimum eligibility criteria for admission thereof, and the method of selection of candidates, duration of the course, course contents and mode of curriculum;
(f) lay down guidelines for compliance by recognised institutions, for starting new courses or training, and for providing physical and instructional facilities, staffing pattern and staff qualifications;
(g) lay down standards in respect of examinations leading to teacher education qualifications, criteria for admission to such examinations and schemes of courses or training;

(h) lay down guidelines regarding tuition fees and other fees chargeable by recognised institutions;

(i) promote and conduct innovation and research in various areas of teacher education and disseminate the results thereof;

(j) examine and review periodically the implementation of the norms, guidelines and standards laid down by the Council, and to suitably advise the recognised institutions;

(k) evolve suitable performance appraisal system, norms and mechanism for enforcing accountability on recognised institutions.

(l) formulate schemes for various levels of teacher education and identify recognised institutions and set up new institutions for teacher development programmes;

(m) take all necessary steps to prevent commercialisation of teacher education; and
(n) perform such other functions as may be entrusted to it by the Central Government."

The NCTE act has given to the Council the power to make regulations generally to carry out the provisions of the act. Among other regulations that can be framed by the NCTE are those that are directly connected with the quality of teacher education, the norms and standards, guidelines on recognition of programmes of teacher education etc. These are in respect of:

- The minimum qualifications for a person to be employed as a teacher under clause (d);
- The special categories of courses on training in teacher education under clause (e);
- Starting of new courses or training in teacher education under clause (f);
- Standards in respect of examinations leading to teacher education qualifications referred to in the clause (g);
- The tuition fees and other fees chargeable by institutions under clause (h);
The schemes for various levels of teacher education, and identification of institutions for offering teacher development programmes under clause (1);

Conditions required for proper conduct of a new course or training and conditions for granting permission.

The Council has framed norms and standards for different teacher education courses including Master of Education (M.Ed.). The act made it mandatory on all institutions that were conducting teacher-training courses prior to 17th August 1995 to apply to the NCTE within six months of the notification of the act for recognition of their course. Also, all institutions that intend to start course/s on teacher education have to apply to the NCTE for recognition of their programme. The norms framed by the council for different teacher education courses have been issued in the form of regulations.

The council performs its regulatory functions through four regional committees. For determining the territorial jurisdictions of the regional committees, the country has been divided into four geographical regions; East, West, North, and South. Teacher
education institutions are required to apply to the concerned Regional Committees under whose jurisdiction they fall. Regional Committees take the help of visiting teams of experts for inspecting institutions on their behalf. Norms and standards for each course framed by the council have fixed the essential physical and instructional infrastructure including the faculty and the supporting staff that an institution must possess for conducting the courses on teacher education. Regulations on norms and standards are used as reference for deciding the grant of recognition to an institution for conducting a course on teacher education. The Act has also provided for an Appeals Committee, which is empowered to examine the appeals of institutions against decisions of the Regional Committees. The NCTE has gained acceptance as a regulatory body largely because of the provision in the ACT that now teachers in schools belonging to the State can be appointed from among only those persons who have undergone teacher training in an NCTE recognised institution.
The Council laid down regulations prescribing specific guidelines for B.Ed. through correspondence with regard to jurisdiction, eligibility criteria, number of seats, tuition fees, entry qualifications, programme components and staff structure etc.

Certain recent developments have added new dimensions to the maintenance of norms and standards in teacher education. The increase in the demand for teacher education and its diversification has led to its commercialisation. The teacher education programmes have become popular due to their 'utility' to both the organisers and the beneficiaries. Throughout the country private agencies have come into teacher education under self-financing scheme. Teacher education, which began initially by payment of stipends to entrant teachers, as thinking then was that a teacher's role was significant to the society, now depends on collection of high fees from students. Instances of charging of donations/capitation fees are also rampant. The entry of private initiatives in teacher education can be attributed to the potential of generating money by running teacher education courses with comparatively small investments compared to
professional courses in engineering and medicine. This seems to have facilitated by the space made available by the State by gradually withdrawing from its responsibility of running institutions both under its direct control as well as aided by it, as per the norms and standards of the NCTE.

The status of teacher education as a professional activity has also come under threat not only because of low rewards attached to it compared to other professions, but more so because of recent policy of state governments on recruitment of teachers.

The NCTE will fix minimum qualifications for teachers in schools. With the efforts of the NCTE alone it may be difficult to ensure quality and standards of teachers. The costs involved in pre-service and in-service teacher education may have been the factor that made the State to find shortcuts such as recruitment of para-teachers and gradual withdrawal from meeting the needs of its institutions. There may be systemic constraints because of the enormity of our problems but the provisions of the NCTE Act will ultimately remain the guiding signposts.
The Council has framed norms and standards for different teacher education courses including for courses of education of teacher educators such as the Master of Education (M.Ed.). Norms and standards for each course framed by the Council have fixed the essential physical and instructional infrastructure including the faculty and the supporting staff that an institution must possess for conducting the courses on teacher education. Regulations on norms and standards are used as reference for deciding the grant of recognition to an institution for conducting a course on teacher education.

The NCTE document - ‘Teacher Education Curriculum: A Framework’ 1978, provides a set of guidelines for the reorganisation of the teacher education curriculum in the context of the 10+2+3 pattern of education, recommended by the Education Commission. These guidelines called for drastic changes in the traditional approach to teacher education starting from the basic philosophy of teacher education to its objectives, structure, content and methodology.
The major recommendations of the NCTE Curriculum framework\textsuperscript{14} were:

1. Adoption of task-oriented and performance-based teacher education.
2. Relating the curriculum of teacher education to national ideology and problems.
3. Providing flexibility for relevance, continuing education and mobility.
4. Adoption of inter-disciplinary and integrated approaches and task-oriented teacher education.
5. Reform of practice teaching and evaluation.

To accomplish these recommendations, the NCTE Curriculum Framework suggested:

1. Reduction of weightage for theory course.
2. Introduction of 'working with the community' as an integral part of teacher education.
3. The development of a training programme package for core skills, and special skills in the different subjects.
(4) Provision for Socially Useful Productive Work (SUPW), and health and physical education.

(5) Orienting practice teaching towards the development of Competencies and skills.

(6) Adoption of the semester system and encouraging innovative practices, experimentation and research.

Taking a holistic view of teacher education reform, the NCTE Framework also recommended several organisational and administrative reforms like financial assistance for the implementation of the programmes, controlling the growth of sub-standards of teacher training institutions through manpower planning, enforcement of norms for accreditation of institutions and certification of teachers.

**Norms of NCTE**

NCTE has prescribed certain norms, which must be followed by every teacher education institution. Besides essential teaching
staff, technical support and administrative staff, the institution must have physical infrastructure.

The teacher education institution should be located in a noise-free atmosphere. It should be relatively pollution free. There should be good transportation and communication facilities and availability of water and electricity. The land area must provide enough space for institutional building and for future expansion and adequate open space for organising games and sports. Essential requirements for sixty students are as follows:

Physical Infrastructure

(Essential Requirement for 60 students)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Requirements</th>
<th>Number</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Classroom</td>
<td>2</td>
<td>60 sqm each</td>
</tr>
<tr>
<td>2.</td>
<td>Multipurpose room - Seminar room</td>
<td>1</td>
<td>100 sqmts</td>
</tr>
<tr>
<td>3.</td>
<td>Hall</td>
<td>1</td>
<td>125 sqmts</td>
</tr>
<tr>
<td>4.</td>
<td>Multipurpose laboratory for computer, Laboratory for Educational Psychology Laboratory for Science Practicals</td>
<td>1</td>
<td>Approximate 100sqm</td>
</tr>
<tr>
<td>5.</td>
<td>Library room with reading facilities for at least 30 students</td>
<td>1</td>
<td>50sqm + including storage space</td>
</tr>
<tr>
<td>6.</td>
<td>Work experiment room</td>
<td>1</td>
<td>60sqmts</td>
</tr>
<tr>
<td>---</td>
<td>---------------------</td>
<td>---</td>
<td>--------</td>
</tr>
<tr>
<td>7.</td>
<td>Principal’s room with attached toilet facilities</td>
<td>1</td>
<td>25sqmts</td>
</tr>
<tr>
<td>8.</td>
<td>Staff room</td>
<td>1</td>
<td>60sqmts</td>
</tr>
<tr>
<td>9.</td>
<td>Office room</td>
<td>1</td>
<td>40sqmts</td>
</tr>
<tr>
<td>10</td>
<td>Store room</td>
<td></td>
<td>25sqmts</td>
</tr>
<tr>
<td>11</td>
<td>Common room with adequate space for women students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Separate toilets for girls, boys, teachers, and staff.</td>
<td></td>
<td>25sqmts</td>
</tr>
<tr>
<td>13</td>
<td>Provision for drinking water facilities in at least two places</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Desirable**

| 1. | Seminar room | 1 | 100sqm for 50 persons |
| 2. | Laboratory for physical science, Natural Science, Psychology and Educational Technology | 1 each | 75sqm with 15sqm for storage |
| 3. | Small group work room | 2 | 25sqmts |
| 4. | A large multipurpose hall | 1 | 150sqmts |
| 5. | Separate school subject room | | 30sqm each |
| 6. | Separate room for teachers | 1 | 20sqmts |
| 7. | Canteen if possible on cooperative basis | | |

**Play Ground**

**Essential**

Small open space for athletics, badminton, volleyball, basket ball, throw ball

| | | | 500sqmts |

**Desirable**

a. Play ground for big outdoor games - football, cricket

| | | | 1000sqmts |
Requirements of Furniture.

Desk, Bench, Chairs, Tables, Dais, Notice board, Bulletin board, Laboratory work table, Reading table, Shelves, Almirahs, Racks, Screen, Storage racks, Librarian filing, cabinet, and Additional furniture in hostel facilities etc.

**Education Technology Items**

For strengthening the new educational system, Educational technology has taken good part. For attaining quality of education, new techniques can be adopted by means of educational technology. The teacher trainers have to promote the practices of employing effective techniques and strategies.

**Desirable:** Radio, Television, Video cassette recorder, Audio cassette recorder, Slide cum filmstrip projector, Over head projector,
Arts materials for preparation of charts slides and models etc., materials for transparencies, Amplifier, Loud speaker, Micro phone, Still camera, Video camera, Computer, etc.

Library Books – at least 3,500 books (desirable)

Laboratories for Physical Science, Natural Science, Psychology and Language laboratory with dual system. Besides of all infrastructural facilities the NCTE has prescribed academic inputs curriculum transactions, etc. and laid down conditions for financial resources and expenditure.

New Directions

The National Policy on Education (NPE) 1986 gave paramount importance to teachers status and their training. In fact, the NPE had stressed that the emphasis will be laid on overhauling the system of teacher education.

The teacher-education is now being considered an important part of the educational system and the qualitative improvement of the teacher is its prime aim. Traditionally, the teacher was more or less concerned with passing on the knowledge acquired by the
previous generation to the present students. And, in doing so, he is influenced by the economic, ecological and the cultural conditions of the school. The teacher is considered not only as a transmitter of cultural heritage, he is also expected to invent new horizons of knowledge and introduce it to his students effectively, thus leaving his own imprints on them. The quality of a teacher depends on the quality of the teacher education programme, which he has undergone. Thus teacher education and the teacher become two sides of the same coin. Teacher education can be visualised as the 'process' and the teacher as its 'product'. Initiatives for a qualitative improvement of teacher education are linked with several factors such as the quality of students entering the teaching career, the relevance of teacher education curriculum, inputs into the professional preparation of teacher educators, quality of in-service training programmes, teacher accountability, etc.
2.2. Expenditure on Teacher Education

Committed expenditure on education at all levels has been the responsibility of state governments. The Central government makes provisions for expenditure on education generally for stimulating developments of certain aspects and for centrally sponsored projects and schemes. The percentage of outlay on education to the total public sector outlay declined from 7.2 percent in the First Five-year plan (1951-56) to 2.6 per cent in the Sixth Five-year plan (1980-85). It however again increased to 2.8 percent during the Seventh Five-year Plan (1985-90). Nevertheless, this outlay was quite inadequate to meet the financial needs to education at different levels. The National policy on Education envisaged that from the Eighth Five-year Plan onwards, the outlay on education would exceed 6 percent of the national income. In fact the percentage of outlay on education actually provided in the eighth plan was much below the proposed level.
The development of teacher education should be viewed and understood in the background of the aforesaid circumstances and financial constraints.

The financial allocation for teacher education is included in the departmental plans in the budget provisions for secondary education as well as university education.

Due to the increasing demand of trained teachers, the number of secondary teacher training institutions has also been increasing year after year. In the year 1991-92, there were about 101 elementary teacher-training institutions, 19 secondary teachers training colleges in Kerala with a total enrolment of 6790. According to the statistics assuming that the bulk of teachers, teaching at the middle level have had training from elementary teacher training institutions, the annual demand is very high.
2.3. Taxonomy of Cost of Education

Cost of education is of utmost importance for educational planning. It is most essential for educational planning in general and planning of the resources in particular. Unit costs are also efficiency indicators. The inverse of unit costs is after all, an index of total factor productivity in the production process. Estimates of costs are essential for estimating resources required for educational sector and for various sub-sectors of education. They also help us in understanding whether resources are optimally allocated between different layers of education. The statistics on cost of education also are themselves indicative of the efficiency of educational system, besides facilitating one to find out the cost effectiveness or cost-benefit ratio of the educational system as a whole and of the different levels of the system. Analysis of costs of education helps in formulating the programmes towards equality in educational opportunities, and equality in educational achievements between different groups of population, different regions, etc. Cost statistics
themselves indicate the inequalities both in quantity and quality of education between different groups of population and the regions. Thus, statistics on costs of education are both general and specific purpose tools in that they are used for different purposes, mainly for planning, forecasting, analysing, decision-making and policy formulation. Besides, they are also used for making inter-regional, inter-group and inter-level type comparisons in education.

Thus there are several kinds of uses of cost analysis in educational planning. To summarise, cost analysis is helpful

(1) in estimating requirement of resources for education,

(2) for proper decision making with regard to inter-sectoral and intra-sectoral allocation of resources,

(3) for monitoring and improving of utilisation of resources

(4) for institutional planning, and

(5) for analytical purposes, such as to measure internal and external efficiency of investments in education, to measure inequalities in education, etc.
Costs of education in economics are incurred at two domains, Private and Public, which may also be referred to as individual and institutional domains\textsuperscript{15} respectively. The prevalent taxonomy of cost as used in education is discussed below with a view to facilitating further discussions, analysis and interpretation of the cost of education and its application to teacher education and for a bird’s eye view the same is presented as Chart.

**Taxonomy of Cost of Education**

```
Cost of Education
  ----------------------------------------
<p>| |
|                                          |</p>
<table>
<thead>
<tr>
<th>Institutional cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring cost</td>
</tr>
<tr>
<td>1. Teacher’s Salaries</td>
</tr>
<tr>
<td>2. Salaries of Other staff</td>
</tr>
<tr>
<td>3. Scholarship, Stipends, etc.</td>
</tr>
<tr>
<td>4. Other Expenditure</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Non-recurring cost</td>
</tr>
<tr>
<td>1. Buildings</td>
</tr>
<tr>
<td>2. Furniture</td>
</tr>
<tr>
<td>3. Equipment</td>
</tr>
<tr>
<td>4. Others</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Individual cost</td>
</tr>
<tr>
<td>Visible cost</td>
</tr>
<tr>
<td>1. Tuition fees</td>
</tr>
<tr>
<td>2. Other fees</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Non-Tuition costs (Maintenance cost)</td>
</tr>
<tr>
<td>1. Books &amp; Stationery</td>
</tr>
<tr>
<td>2. Hostel</td>
</tr>
<tr>
<td>3. Transport</td>
</tr>
<tr>
<td>4. Uniforms</td>
</tr>
<tr>
<td>5. Others</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Opportunity cost</td>
</tr>
<tr>
<td>Loss of salary income</td>
</tr>
</tbody>
</table>
```
(a) Institutional Cost of Education

Cost incurred at institutional level, whether the institution is a government or a private or a private aided is called institutional cost of education though many a time they are referred to as government or Public costs. The institutional costs of education are generally analysed adopting any one of the following ways of classification.

- Variables and fixed costs of education
- Recurring and non recurring costs of education
- Current and Capital costs of education.

One may expect that but for the terminology the three classification mean the same. In other words, the fixed, non recurring and capital costs mean the same viz. the costs incurred almost once for all and the costs that do not vary along with a change in the input/output in the educational system. On the other hand, the variables, capital or recurring costs refer to the costs that are incurred every year and have direct correspondence with the
inputs or outputs of the system. Viz. the pupil. It may be noted that recurring costs are defined as one that are incurred every year and non-recurring costs are incurred generally once for all. Recurring and non-recurring costs are synonymous with variable and fixed costs respectively.

Fixed costs are defined as those costs that do not change with a change in the number of pupils e.g.: cost on buildings, while variable costs vary with every change in the number of pupils. E.g.: cost on teacher salaries, laboratory materials, scholarships etc. In other terms fixed costs do not change with increase in the number of pupils, but variable costs may follow a different pattern. One cannot rigidly argue that certain cost are fixed and others are variable. Sometimes distinction is made between short run fixed costs and long run fixed costs. For example cost of buildings forms long run fixed costs. While cost on teacher’s salaries etc. are referred to as short run fixed cost. The fixed costs include the costs on the following items;
a) Purchase of land and buildings or costs of construction of buildings.

b) Purchase of furniture

c) Purchase of durable equipments, furniture etc.

d) Costs on other non-recurring items.

With regards to the fixed costs, it is quite difficult to calculate the unit costs per year. Generally in many studies rate of depreciation is calculated. The recurring costs include:

1. Salaries and allowance of teaching staff

2. Salaries and allowance of non-teaching staff

3. Scholarships, stipend, fee concession

4. Purchase of non-durable or consumable material

5. Costs on maintenance and repairs of building, furniture, and equipments

Many a time capital costs and current costs are synonymously used with fixed costs and variable costs. The distinction between current costs and capital costs is not precise. It can be argued that
goods such as books, which last several years, could be counted as capital equipment, but these are almost always counted as current costs. In practice, the distinction between current and capital goods is often a matter of administrative convenience. Expensive and long lasting items such as buildings are paid for out of a separate budget, but they are a part of capital costs.

From economist's point of view, building costs provide an example for both direct and indirect cost. Direct cost is the capital cost that is paid as price for the purchase of the building. For planning process we takes the annual depreciation cost of buildings, taking into consideration the lifetime of the building. This indicates the annual value of the use of the building in general. However, one should take into account the opportunity cost of the investment in the purchase of the buildings. If the money had not been used for this purpose, it would have been used for a different purpose and that can be opportunity cost of the building. The opportunity cost indicates the economic usefulness of the asset. On the whole, the benefits foregone which would have been available to the society in
the absence of educational programmes would be the social opportunity cost of education which might be different from individual opportunity costs. All scarce resources allocated to education involve opportunity costs. Allocation of scarce resources may even have negative consequence for the quality of life locally.

(b) Individual Cost of Education

Individual costs of education are those costs of education incurred by the students or by parent/guardian or by family as a whole. Sometimes they are also referred to as private costs. Individual costs essentially consist of direct costs and indirect costs. Direct costs are those, which are directly visible. They include all money expenditures incurred. They include not only payments to colleges in terms of tuition fee and other fees and charges but also other expenditure incurred on purchase of books, stationery, uniform, hostels, traveling expenses etc.

Individual costs also include indirect costs that are not so directly visible. They are generally referred to as opportunity costs
of foregone earnings. Opportunity costs refer to value of student's
time. They refer to earnings that would have been earned had the
student chosen not to go for education, but chosen to go to labour
market. In the earlier years of debate in economics of education,
there was a lot of controversy on the appropriateness of considering
opportunity costs of education. It is now well recognised as an
important component of total costs of education. Empirically
opportunity costs of teacher education are treated as equivalent to
the earnings of the works of the age group.

Individual cost of education include (i) fee, (ii) out of pocket
costs on education excluding fees, such as the maintenance
expenditure, expenditure on books, stationery, transport, uniforms,
hostels, etc.; and (iii) the foregone earning, or the opportunity cost
that is given up to obtain education.

Though Kerala is a highly literate state, it faces crucial
unemployment. Hence the investigator found it difficult to calculate
the opportunity cost of teacher education in the present study. It is
generally argued that for planning purpose it is sufficient for the state to know about the institutional or the public costs of education. This is not wholly true. It is equally important for the state to have a clear idea of the individual cost of education and the extent to which individuals will be ready to bear their visible and invisible costs of education. This information is absolutely essential to make proper planning of resource for education in general to formulate policies and to plan public expenditure on scholarships, stipends, free studentship etc. in particular. Ignoring these aspects is too costly and it will result in a wide gap between the expected enrollments and actual enrollments. A substantial part of the problem of non-attendance and the dropouts could be attributed to ignoring the aspects of individual costs including the opportunity costs in resource planning. But many studies on costs of education in developing countries have been confined to institutional cost only. Hence in the teacher education institutions a few seats are reserved for departmental candidates who are employed by the educational
department. So this type of opportunity costs is taken into account in this study.

Social Costs (Total costs) of Education

The sum of individual costs and institutional costs is the total cost of education.

\[
\text{Individual cost} = \text{Household expenditure on education} + \text{Opportunity cost} \\
\text{Institutional cost} = \text{Recurring cost} + \text{Institutional cost}, \\
\text{Social cost} = \text{Individual cost} + \text{Institutional cost}
\]

Unit Cost of Education

Unit cost of education refers to cost per unit. In practice, units in unit costs of education refers to pupils enrolled. It is also argued that the number of pupils actually attend the institution should be taken as the units. Alternatively a cost of education is calculated per unit of output. i.e., per successful student. This is also known as 'effective' cost of education. The effective cost of education takes into account the wastage in education. The difference between the
effective costs and what can be called 'normal' costs of education reveals the efficiency of the given level of educational system.

Sometimes it is also suggested that unit costs of education should be calculated per child of the relevant age group population. This may indicate to some extent the efficiency of the educational system, efficiency being measured in terms of the coverage of relevant age-group population by the educational system. In addition, for certain purposes of comparison, costs of education per capita, taking the whole population of the concerned region into account, are also computed.

**Time Dimension of Unit Costs**

The statistics on costs of education should refer to a time period. Generally unit costs of education are calculated per year. It is reasonable to calculate the unit costs by the duration of a given level / type of education. So in this study investigator tried to calculate the unit cost, per year.

Thus an analysis of teacher education scenario of Kerala reveals that there are different institutions of teacher education
under different types of management. Through there are four Universities namely Kannur University, Calicut University, Mahatma Ghandhi University and Kerala University responsible for the evaluation of the students and for the reforms in connection with teacher education, conspicuousness differences exist in the multifarious areas of financing of teacher education. This situation also reinforces the relevants of the present study.
Reference

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2.3. Taxonomy of Cost of Education


