CHAPTER - I
INTRODUCTION

1.1 Nepal: A General Background

In the past, Nepal was cut off from the rest of the world. There was virtually no interaction, not only with the outside world but even among the ethnic groups of the country. This total isolation from the world held Rana regime responsible for depriving the citizens from their socio-political rights. Nepal was ruled by the Rana Prime Ministers from 1846 to 1951 A.D. (Wood, 1958, and Mainali, 1979).

However, with the dawn of democracy in 1951, national activities began to take place. Some friendly countries offered Nepal a helping hand to wriggle out of the shell. Yet, Nepal with very low per capita GNP of 243.81 dollars (CBS, 1998) still remains one of the least developed and the poorest countries in the world. This may be because of the limited resources with which the country has to cope up with. Even the available ones can not be harnessed easily due to lack of sound infrastructure.

1.1.1 Location

Nepal is a South Asian country, land locked with China in the North and India on the other three sides. It lies within the latitude of 26° 22' to 30° 27' North and within the longitude of 80° 4' to 88° 12' East. The rectangular shaped country has a total area of about 147, 181 sq. km. It is 885 km long from East to West and 193 km. broad from South to North. (CBS, 1998).

1.1.2 Physical Division

The geographic oddity has posed a number of barriers in the development of the country. Nepal has geographically been divided into three ecological belts; Terai, Hills and Mountain. Mountains cover 15% of the total land, lie at an altitude of 4877 m, above the sea level and cover the northern most part. Hills constituting about 68 % of the total landscape fall 600-4877m.
above the sea level and lie in the mid zone of the country. Terai, the only plain area of the country constitutes 17% of the total area and lies at only about 60-300 m, above the sea level. It is towards the southern belt of the country (CBS, 1998).

1.1.3. Climate

Climate is variable, varying from hot tropical in the Terai to Tundra and often arctic cold in winters in the mountains. Hills, however, have subtropical type of climate (CBS, 1998).

1.1.4 Administrative Division

Nepal has been divided into five administrative divisions - Eastern, Central, Western, Mid-Western and Far-Western. Nepal has a total of 14 zones and each zone is again divided into districts. There is a total of 75 districts. A Chief District Officer (CDO) is the head of each district.

A district is again comprised of a few municipalities and Village Development Committees (VDCs). There is total of 58 municipalities and 3913 VDCs in Nepal (CBS, 1998).

1.1.5 Population

The total population of Nepal, according to census 1991, was 18,491,097 with 49.87% population males and the remaining 50.13% population females. The annual growth rate of population from 1981 to 1991 was 2.08%. The population density was 125.64 persons per sq.km. In 1991, the total population in Terai, Hills and Mountains regions were found 46.7, 45.5 and 7.8 percent respectively (CBS, 1998). Hence, Terai and Hills are densely populated as compared to Mountains. The reasons are obvious; the southern belt, Terai is a strip of plains which produces food crops as well as cash crops. Transportation is much easier and the agricultural and industrial development in this region must have lured people to immigrate to this belt, leading to increased population density (CERID, 1984).
The high population density in the hills has a different reason. The capital of the country, Kathmandu, being in this region and the region being educationally and industrially much more forward than the rest of the country, people must have immigrated in search of various job opportunities and for educational purposes etc. The mild Salubrious climate also accounts for making this region the area of core settlement of a large mass of people (CERID, 1984).

The mountain region with climate ranging from temperate to arctic with extremely cold winters and the lack of developmental acts often force the inhabitants to leave their homes and migrate to the better regions which is often Hills or Terai (CERID, 1984).

1.1.6 Ethnicity

Nepalese people belong to two distinct groups, considering their ethnicity, Indo Aryans and Tibeto-Burmans. Indo-Aryan group comprises Brahmins, Chhetris, some occupational castes like 'Sarkis' (cobbiers), 'Damais' (tailors cum brass band players), 'Kamis' (blacksmiths), 'Sunars' (goldsmiths) etc. The Tibeto-Burman group comprises Sherpas, Gurungs, Magars, Tamangs and so on. There is another distinct group, whose population is mostly concentrated in Kathmandu Valley, the Newars. They have a rich heritage of art and architecture and are well known as the business class people. Few distinct groups, in a quite backward and primitive stage, like Satars, Chepangs, Kusundas and Rautes also, live in their own communities in the country.

Caste system still persists in the country. According to this system, Brahmins are considered to be the high priest caste people, who were previously involved in the religious functions. Then come Chhetris, the warrior class people who had much influence over the politics of the country. Baishyas, the business class people come next and then the untouchables. The discriminatory treatment of these low caste people is still practised in the country. However, with modernization, this system is gradually disappearing from the societies.
1.1.7 Religion

Majority of population follows Hinduism in Nepal. Followers of other religions like Buddhists, Muslims, Christians are also found in the country. Hindus, Buddhists, Muslims, Christians, Kirants, Jains and other religious groups constitute 86.51, 7.78, 3.53, 0.17, 1.72, 0.04 and 0.24 percent of the total population respectively. People of all religions live together in religious harmony. There are even a number of cross-cultural interactions amongst different religions (CBS, 1998).

Religion forms an integral part of life of Nepalese people and hence, they enjoy observing a number of religious ceremonies and festivals. Temples, Stupas, Shrines are dotted all over the country.

1.1.8 Language

Nepali, being the mother tongue of 50.3 percent of people in the country, is the national language of the country. However, there are also many other major languages and several dialects spoken by different ethnic groups of the country. Maithili, Bhojpuri, Tharu, Tamang, Newari and others are about 11.8, 7.5, 5.4, 4.9, 3.7 and 16.4 percent respectively (CBS, 1998).

Nepali language speaking ethnic groups comprise Brahmins, Chhetris, Sarkis, Kamies, Damais etc. The Sherpas, inhabitants of the northern Himalayas, Newars, the valley dwellers, Gurungs and many others speak the language of their own. Terai dwellers, however, speak languages like Maithili, Bhojpuri, Tharu, according to the ethnic group to which they belong.

1.1.9 Economy

Nepal is predominantly an agricultural country with 81.1 percent of people involved in agriculture. People involved in business and service are comparatively fewer than people involved in agriculture i.e 7.2 in business and 9.3% in service (CBS, 1998). Ironically, the cultivable land is much less and most of it is confined to Terai region, the southern belt of the country.
Mountain region is almost uncultivable except for some fruit plants and potatoes. Hills are cultivable but this cultivation does not supplement the demand and need throughout the year.

Food grain production per annum is 4.4 million which gives a quota of 1550 calories per person per day against the criterion of 2250 calories intake per day as set up by the National Planning Commission of Nepal (CERID, 1984). However, it increases to 1930 calories with inclusion of other food products like milk, meat, vegetables etc. Industrially, Nepal has yet much to see. Except for jute, Nepal has practically very little of exportable production.

1.1.10 Transportation

Inadequate transportation facilities still play a crucial role as an obstacle for the country's development. Most parts of the country, especially mountains and hills are still not accessible. The only means of reaching these areas are load bearing men or animals which is ironic taking into consideration the advanced technology of the modern world. However, transportation in Terai is comparatively easier. But due to lack of adequate budget, government has not yet been able to make even major parts of the Terai region accessible.

Airway facilities are expanding in the remote areas of the country but there are still some areas which lag behind in this aspect of development. Besides, air transportation is expensive and the local people can hardly afford to travel by airplanes (CERID, 1984).

In the hills, some roads that have been constructed are unfavorable for transportation. These roads remain buried due to landslide that is quite common during monsoon. Clearing away these roads sometimes even takes years.

1.1.11 Health and Nutrition

Inspite of the various plans set up by the government for the promotion of health and nutritional status of the Nepalese people, Nepal still faces poor-health and nutritional standards of her people. The major causes underlying this problem are poor economic condition and ignorance of the Nepalese people.
The population growth rate is high and is increasing almost every year while the food production has still remained same for a number of years. This accounts for the poor nutritional status of the people. People still lack the knowledge of importance of different types of food stuff. So, even the ones that are available are not used properly and this has led them to a number of nutritional deficiency diseases. The poor health status can be ascertained by low life expectancy of Nepalese people i.e. 56 years.

1.2 Present Structure of Education in Nepal

The structure of education in Nepal is divided into two main levels i.e. (i) School Level (ii) Higher Education Level. The structure of both of these levels is in transitional phase at present, since the government has already decided to extend the school education by two years, which directly affects the existing Proficiency Certificate Level (PCL), equivalent to Intermediate Level of Education. The duration of each level of education is briefly discussed below.

1.2.1 School Level Education

School education according to educational structure of government of Nepal, at present, has four consecutive levels; Primary, Lower Secondary, Secondary and Higher Secondary. Beside these four levels, there is another level which is called pre-primary education. But it is not considered as formal level of education by the government.

Primary Level of education extends from grade one to five. The primary school-age is from six to ten years. So, the children who have completed age five are eligible to be enrolled in grade one no matter whether he/she has pre-primary educational background or not. This is why this level of education is considered as the first level of education by the government.

Lower Secondary Level of education starts from grade 6 and ends at grade 8. Those pupils who have passed in grade five district level test are eligible to be admitted in grade 6. The actual age of the pupil for this level of education is from 11 to 13 years.
Secondary education consists of grades 9 and 10. Those who complete districtwise test of grade 8 are eligible to be enrolled in grade 9. The age of this level of education is 14 to 15 years. This level of education prepares the pupil for School Level Certificate (SLC) Examination held at the national level.

The government has already decided to extend the school education by two years i.e. from ten to twelve years, in a form of Higher Secondary Level (HSL) in 1988. Three years after the decision was made, it has been effective with opening up of some (38) higher secondary schools in the country. Emphasis is still laid on opening adequate number of higher secondary schools for the SLC graduates and on phasing out the PCL from the University (Shrestha, 1997).

1.2.2 Higher Education Level

Higher Education in Nepal has four consecutive levels; Proficiency Certificate Level (PCL), Bachelor Degree, Master Degree and Doctoral Level.

PCL is considered as the first level of higher education in Nepal. It is overlapped by HSL of school education, because PCL is two years of education after SLC and so is the HSL. However, there are some PCL programmes with duration of 3 years. The overlapping of these two levels of education is due to the fact that the government has decided to extend the school education from ten to twelve years and to phase out the PCL programme from the University. But, the government could not open Higher Secondary Schools (HSSs) in required number according to its plan and hence, accommodating the SLC graduates who want to continue their education by joining HSSs, is far beyond its intake capacity yet. So, the PCL programme still being run in most of the campuses of Tribhuvan University (TU) could not be phased out. However, in line with the government's decision, TU has already stopped approving the new programmes in PCL in its campuses and also the opening of new campuses with PCL. Moreover, TU is gradually phasing out PCL recently and has planned to phase out this level from all its campuses in the future.
Graduates of HSSs and PCL are eligible to apply for the enrolment in Bachelor Degree Level. The duration of this level varies from 3 to 5 years according to the nature of the programmes. For instance, the duration of Bachelor Degree programmes in Humanities and Social Science is of three years whereas the Bachelor Degree programme of Engineering and Medicine (MBBS) requires 4 and 5 years respectively.

The duration of Master Degree level in all the faculties and institutions is of two years in Nepal. Those who complete Bachelor Degree will be eligible to apply for the enrolment in Master Degree programmes.

Regarding the Doctoral Level Education, the graduates of Master Degree will be eligible to apply for enrolment in this level. The duration of this level is of three years. The present structure of education in Nepal, according to government's policy is presented in the following figure.

1.3 Primary Education in Nepal: A Historical Perspective

The history of primary education in Nepal began in the ancient times, if the education provided by the priest in Hindu temples and monks in monasteries is considered as primary education. However, no historical documents, which pointed out the specific year of starting of this type of education, are available (Shrestha, 1982).

Primary education in Nepal, as defined and understood today and which is regarded as a system of mass education delivered to children during day time by a full time teacher, has a very short history (Shrestha, 1982). This is due to the fact that the Rana regime, which put the country in dark,
uncontaminated by the present day civilization and kept the country isolated from the rest of the world for more than a century (1846-1951), considered education as something like a taboo for the common people of Nepal. However, an English type of school, named Durbar School, was established for the first time in Nepal by the Rana Prime Minister, Janga Bahadur Rana, in Kathmandu in 1854 to provide education to his family members and his followers (Wood, 1965). Similarly, a Sanskrit School was established by the Prime Minister, Ranadeep Singh in 1877. Such type of Sanskrit Schools were subsequently extended throughout the country. The next Rana Prime Minister, Dev Shamsher, opened a Language School in 1900. The number of such schools increased throughout the country and reached 50 in number in Kathmandu Valley and 100 in plains and hills of the country (Shresetha, 1982). In 1947, some Basic Primary Schools were also established. Similarly, education was being provided by some Gumbas (Buddhist monastic) and Madarsa (Muslim schools also). Hence, there were six different types of primary schools before the political revolution against the Rana regime in 1951; they were the Gumba System, English System, Sanskrit System, the Madarsa System, Language School and Basic Education System. The Rana regime left the country with 321 primary schools in 1951 (NESP, 1971).

With the dawn of democracy, after the political revolution against the Rana regime in 1951, there came an awakening for the need of education amongst people. Consequently demands of primary education increased from all quarters of people. The government adopted very liberal policy on approving the primary schools established in private sector (Shrestha, 1982). Besides, the government itself also opened primary schools in various parts of the country. Therefore, the expansion of primary education after 1951 was found to have been remarkable.

With a view to review the education system of the country including primary education and to recommend measures for a comprehensive reform of the education system, Nepal National Education Planning Commission (NNEPC) was formed in 1954. The commission suggested to introduce free primary education of five years' duration followed by compulsory primary
education as soon as possible. It suggested to prescribe a common curriculum for all schools seeking government recognition and financial support through grants in-aids (NNEPC, 1956). In line with the recommendations of the report, the government established primary schools with a new (common) curriculum. However, the regular type of schools in which more weightage was given to English Language, increased in greater number as compared to the national schools with common curriculum. So, the government could not adopt single system of primary education in the country, as recommended by the commission.

In 1961, All Round National Education Committee (ARNEC) was formed in order to make a study on education system and to suggest reformative measures (ARNEC, 1961). The Committee suggested to drop English from primary school curriculum. The other suggestions mentioned in the report of ARNEC were found to be more or less similar to those of the NNEPC. In line with the recommendations made by the Committee, more changes had been brought about in the areas of administrative structure, primary teacher training curriculum, supervision etc. for the development of primary education. Similarly, Free and Compulsory Primary Education was introduced in some areas like Dharan, Tansen, Jhapa and Chitwan as an experiment (Shrestha, 1982).

One of the remarkable periods in the history of primary education is the introduction of National Education System Plan (NESP) in 1971 which gave top priority to the expansion of primary education. This system was introduced with the aim of systematizing educational development in the country. The NESP had brought major changes in the various aspects of primary education, i.e. reduction of duration of primary education from five to three years, reduction of subjects in line with the new objectives, adoption of common/single curriculum throughout the country, provision of 100 percent salary to the primary school teachers, increment of salary, provision of raising nominal fee from students, fixing the target of students enrolment etc. (NESP, 1971). This system greatly helped in quantitative expansion of primary education (Shrestha, 1982).
In 1981, full term evaluation of the NESP was made through which some changes were brought in primary education along with the other levels of education. These changes consisted of inclusion of grade IV and V in primary education, revision of subjects in curriculum and the like (CERID, 1983).

In 1987, the government declared Basic Needs Fulfilment Programme (BNFP) with a view to meet basic needs of the people by the year 2000. Primary education was one of the main components of this programme. Under this programme, the government has set the goal of universalization of primary education by the year 2000 AD. In line with this goal, adequate number of primary schools were planned to be established for the children of primary school going-age on the basis of; walking distance of the children, distance between every two schools, number of students etc. (HMG, 1986). Hence, this programme has also helped in extending the primary education.

After the restoration of democracy in 1991, a National Education Commission (NEC) was formed to recommend educational policies in the changing context. The recommendations related to the primary education gave more emphasis on qualitative improvement of primary education. For instance, the Commission suggested revising of the curriculum, conducting long-term (10 month) teacher training, making instructional materials available, making teaching effective etc. (NEC, 1992).

With a view to recommend the educational policies which would help in the development of appropriate manpower required for the country in twenty-first century based on studying and analysing the existing educational structure, High Level National Education Commission (HLNEC) was formed in 1998. The recommendations related to primary education gave much more emphasis in the accessibility of primary education to all, compulsory primary education, establishment of primary schools in appropriate areas, ways of attracting children from target groups to the primary schools etc. (HLNEC, 1998). The government, at present, is gradually implementing the recommendations presented by the Commission.
The foregoing discussion reveals that more efforts have been taken for the quantitative and qualitative improvement in the field of primary education. The brief description on quantitative expansion (Number of schools, students and teachers), in different periods of time is made in the following paragraphs.

1.3.1 Primary Schools, Students and Teachers

The main indicators of quantitative expansion of primary education are increase in the number of primary schools, students and teachers. Therefore, in order to present a picture in this aspect, a brief description on number of schools, students and teachers in different periods of time, is made in the following paragraphs:

1.3.1.1 Primary Schools and Students

There were no such modern schools as the schools of today before Rana regime. Though a few schools were established during the Rana regime, education was not accessible to all the common people of Nepal. It was a privilege of only a chosen few. The history of modern primary education which was accessible to all the common people of Nepal, started only in 1951. Hence, quantitative data on primary education before 1951 are not available. The number of schools and students are presented in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Schools</th>
<th>Students</th>
<th>Gross Enrolment (in percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>321</td>
<td>8505</td>
<td>0.9</td>
</tr>
<tr>
<td>1961</td>
<td>4,001</td>
<td>182533</td>
<td>15.8</td>
</tr>
<tr>
<td>1971</td>
<td>7,632</td>
<td>410000</td>
<td>32</td>
</tr>
<tr>
<td>1981</td>
<td>10,628</td>
<td>1388001</td>
<td>70.6</td>
</tr>
<tr>
<td>1991</td>
<td>18,694</td>
<td>2884275</td>
<td>107</td>
</tr>
<tr>
<td>1998</td>
<td>23,885</td>
<td>3587665</td>
<td>123.9</td>
</tr>
</tbody>
</table>


In 1951, only 1 child out of about 100 children was in school and only 2 persons out of 100 were literate. As shown in the above table, there were only 321 schools for 8505 students in 1951. The number of schools increased by 12.46 times from 1951 to 1961, 1.91 times from 1961 to 1971, 1.39 times

The number of students increased by 21.46 times from 1951 to 1961, 2.25 times from 1961 to 1971, 3.39 times from 1971 to 1981, and 2.08 times from 1981 to 1991. In 1998, altogether there were 3587665 students in schools. The students-school ratio was found to be 27, 46, 54, 131, 154 and 150 in 1951, 1961, 1971, 1981, 1991 and 1998 respectively. The percentage of gross enrolment of the students was found to be 0.9, 15.8, 32.0, 70.6, 107.0 and 123.9 in 1951, 1961, 1971, 1981, 1991 and 1998 respectively. However, the percentage of net enrolment was found to have been 70.5 only in 1998.

1.3.1.2 Teachers

Altogether there were only 1271 teachers in 1951. This figure reached 18250 in 1971. In other words, about 1000 teachers, in an average, had been increasing every year from 1951 to 1971.

The following table presents the picture on the number of total primary school teachers and the percentage of trained teachers from 1976 to 1998 in every five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Teachers</th>
<th>Percentage of trained teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>18250</td>
<td>NA</td>
</tr>
<tr>
<td>1976</td>
<td>20775</td>
<td>39.0</td>
</tr>
<tr>
<td>1981</td>
<td>29134</td>
<td>36.3</td>
</tr>
<tr>
<td>1986</td>
<td>53,405</td>
<td>33.7</td>
</tr>
<tr>
<td>1991</td>
<td>74,459</td>
<td>42.83</td>
</tr>
<tr>
<td>1996</td>
<td>89,378</td>
<td>43.6</td>
</tr>
<tr>
<td>1998</td>
<td>91878</td>
<td>46.46</td>
</tr>
</tbody>
</table>

Note: NA = Not Available

Thus, the highest increment in number of teachers was observed in the period of 1981 to 1986. The number of teachers reached 91878 in 1998.

Though the priority was given to providing trained teachers to the primary schools by the concerned sector after the establishment of Basic Teacher Training Centre in 1947, the picture on the percentage of the trained teachers was not found to have an encouraging trend yet. The number of trained teachers, as shown in the above table, was found to be 39 percent only in 1976. This figure was gradually decreasing every year except for a few years upto 1990. However, the figure could not exceed more than 39 percent upto 1990. As shown in the above table, the figure decreased by 2.7 percent in 1981, and 5.3 percent in 1986 as compared to that of 1976. Compared to 1986, the figure increased by 9.13 percent in 1991. The increment figure from 1991 to 1996 was noticed to be very negligible i.e. 0.77. The number of trained teachers reached 46.46 percent in 1998. So, Nepal is still less than half the way in accomplishing its goal in providing training to all the untrained primary school teachers.

### 1.4 Primary Teacher Training (PTT) Programme

Though the history of PTT programme in Nepal is very short, Nepal has experienced various types of PTT programme within this short period of time. Similarly, the country is facing various problems regarding the PTT programme. So, this section presents the history of PTT programme and its problems under their respective headings.

#### 1.4.1 History of Primary Teacher Training Programme

The history of PTT programme in Nepal dates back to 1947 when the Basic Teacher Training Centre (BTTC) was established to provide training to teachers of Basic Schools (CHIRAG, ND). PTT programme both in-service and pre-service has had a short but checkered history in Nepal (Malla, 1995), because within a short period of time, the PTT programme in Nepal has passed through different stages of programme planning, application and improvement (Karmacharya, 1975). In other words, PTT programme in Nepal has passed through several phases with distinct characteristics in each phase.
(HMG/MOE, 1997). Each of these phases is briefly explained in the succeeding paragraphs.

1.4.1.1 Initial Phase (1947 - 1955)

Under this phase, PIT programmes conducted by Basic Teacher Training Centre (BTTC) and National Teacher Training Centre (NTTC), are described below:

(i) Basic Teacher Training Centre

There were about 55 Basic Schools in 1947, which gave emphasis on vocational education i.e. Craft, Weaving, Dyeing, Agriculture, Wood Work etc. (NNEPC, 1956). In order to train the teachers of these schools, BTTC was established in 1947 for the first time in Nepal. The duration of the training programme was of one academic year. The selection and recruitment task of the trainees was taken care of by the centre itself on the basis of quota allotted for different parts of the country. The minimum qualification of the trainees was high school graduate or an equivalent degree.

In the training programme, lecture was rarely used as a method of instruction. Knowledge and skills that needed to be imparted to the trainees were provided to them through practical activities. Hence, the training was conducted through participatory approach. Similarly, training and teaching practice were conducted simultaneously. Evaluation of the trainees in teaching practice was done by the concerned instructors of the training centre. In order to assess the trainees' progress, unit tests were given from time to time by the instructors in all the subjects. Similarly, observation of the trainees' activities was also a major tool for evaluating their progress. In addition to these, a test was held in each subject at the end of the training. The trainees were declared either 'pass' or 'fail' on the basis of the final test along with the internal evaluation.

Since Basic Schools proved to be incompetent and unpopular, the training for the teachers of these schools was also discontinued in 1953 (NNEPC, 1956).
(ii) National Teacher Training Centre

National Teacher Training Centre (NTTC) was established in 1954 in Kathmandu where the BTTC was conducted (Malla, 1995). The main purpose of this training centre was to provide training to all the primary teachers working in the schools throughout the country. In the beginning, the duration of the training was of three months which was extended to six months in the next year. Again, it had been extended for one year for the class 8 completers and for two years for those who were below class 8. In two years programme, first year was devoted for academic upgrading of the trainees and the second year to impart the training courses. Regarding the minimum qualification of the instructors, they must have Bachelor Degree in Education.

Since the main aim of such training was to enable the trainees to teach all the primary school subjects, the training courses consisted of all the subjects taught in the primary schools. The nature of the training was activity based type and hence, it was conducted through participatory approach. The evaluation of the trainees was done through internal and external evaluation system. So, there was a provision of unit tests and final test in all the subjects. The final test was conducted by the centre itself.

This centre operated the training only for two years and was closed in 1956, because it was unable to produce trained teachers in required number as this centre did not have network throughout the country.

1.4.1.2 Normal School Phase (1956-1965)

Realizing the importance of training for enhancing the quality of education, College of Education was established in Kathmandu in 1956, as recommended by NNEPC. There were eight departments in College of Education and one of them was Normal School Department. There were three units namely (i) Field Curriculum Consultants (ii) Mobile Training Units (iii) Kathmandu Unit, in Normal School department (COE, 1959). The main objective of the Normal School was to provide the training to the primary school teachers working in the schools and prospective primary school teachers who completed grade 8. So, the school conducted in-service as well
as pre-service training programme (Malla, 1995). The duration of the training was of ten-months. Since its establishment it had organized several mobile teams to conduct the teacher training programme in different parts of Nepal. So, the Normal School Training for primary teachers began in 1956 with residential training at sites that moved around the country (Shrestha, 1982).

There were two types of training programmes in 1960: one year and two year training programmes. Two-year programme was for those who were below class 8. The first year of this programme was allocated for academic upgrading course whereas second year for training courses. In one year programme, professional training was given to those having 8th grade certificate (Shrestha, 1982 and Shrestha, 1977).

Since the workshop was the major method of instruction, the training was conducted through participatory approach. There was a provision of internal and external evaluation system to assess the achievement level of the trainees. So, unit tests during the training period and final test at the end of the training, were held by which the trainees were declared as 'pass' or 'fail'.

1.4.1.3 Permanent Primary Teacher Training Centre Phase (1966-1970)

As per the recommendation of the ARNEC-1961, all the Normal Schools including mobile teams were converted into Permanent Primary Teacher Training Centres (PPTTCs) in 1966 (HMG/MOE, 1997) and they were located in the strategic locations to serve the training needs of the fixed hinter-lands (Shrestha, 1977). So the network of the normal schools was replaced by the PPTTCs. Two types of programmes (one year and two year programmes), as in Normal School Phase, were conducted in these training centres (HMG/MOE, 1997).

At the end of the first month of the training, an ability test was conducted and those who failed in the test were removed from the training. Training was conducted through participatory approach. The duration of teaching practice was of one month. Each trainee was supposed to prepare four lesson plans in each primary school teaching subject and to teach in the primary schools (COE, 1966). In order to evaluate trainees' performance, four
separate tests were held during ten-months of training and each test was held every 2.5 months. The average score from among the three best tests out of four was calculated, which would be the final evaluation of the trainees. There were two grades in the test, i.e. 'Pass' and 'Distinction' (COE, 1966).

In 1966, there was another programme under the PPTTC Programme which was named as Extension Programme. This programme was only for the teachers working in the schools. Under this programme, two month training was given during long vacation each year. A primary teacher was required to take this training three years continuously and then this training was made equivalent with one-year training programme.

1.4.1.4 Institute of Education Phase (1971-80)

In 1971, NESP was implemented which provided a new prospect for the development of teacher education in Nepal (NESP, 1971), because it stressed upon training obligatory to get permanent tenure in school teaching. Similarly, teacher's salary was raised drastically making it comparable to other jobs with similar academic degree requirement. Moreover, salary differential was introduced between trained and untrained teachers. Likewise, the system of partial training allowance was introduced for partial training.

These policies placed the teacher training on new footing thus, making it very popular overnight, and demands for training increased throughout the country. In order to meet the growing demand of training, all the training institutions being conducted before 1971 in the country, were organized under the umbrella of Institute of Education (IOE) which is now called Faculty of Education (FOE) of Tribhuvan University (Malla, 1995). Accordingly, the scope of activities of the IOE was significantly enlarged and it conducted various types of new initiative and innovative PTT programmes in all its campuses during 1971 to 1976, so that the growing demands of the trained teachers could be met within a short period of time (Malla, 1995). Each programme has been in response to particular needs. The innovative programmes that were introduced in the IOE during those times are briefly described below:
(i) **A-Level Programme**

After the implementation of the NESP, Certificate Level (Intermediate Level) in Education Programme was conducted in almost all the campuses of the IOE since 1971. This programme consisted of four semesters. The first two semesters of this programme, named as A-Level, were designed to produce trained primary school teachers. The A-Level programme was organized for pre-service and in-service teacher with SLC qualification (Malla, 1995).

During the course of instruction in this programme, lecture method was extensively used in the classrooms. There was a system of internal and external evaluation to assess the trainees' performance. In order to get the A-Level Certificate, trainees were required to pass in first and second semester separately.

To train the primary school teachers through A-Level programme i.e. First year campus programme was both fallacious and deceptive. It had been more an exception rather than a rule with fresh students to terminate his Certificate Level to take up primary school teaching job. Most of the students continued the study in the campus for the second year to become lower secondary teacher. As a result, this programme was discontinued (Shrestha, 1982).

(ii) **Women's Teacher Training Programme**

It was assumed that the presence of female teachers in the schools would greatly serve in increasing girls' enrolment in the schools. Hence, in order to train the rural girls from economically and socially disadvantaged groups as primary school teachers, Ministry of Education and Culture (MOEC) initiated the Equal Access of Women to Education as a project (EAWEP) with the support of UNICEF, UNESCO, UNDP and NORAD (IOE/CERID, 1981). The training programme was conducted at IOE campuses where hostel facilities were available for the trainees. The programme consisted of two courses which were titled as A-Level and B-Level (CERID, 1986).

**A-Level:** This was the training under EAWEP given to those women who had passed SLC. (This programme was similar to the A-Level programme
mentioned above). It was introduced in Pokhara Campus in 1971 and was subsequently extended to Dhankuta Campus in 1973, in Nepalgunj Campus in 1976 (CERID, 1986 a).

**B-Level**: Though the presence of lady teachers in primary schools of remote areas would motivate parents in sending their girl child to schools, the girls who had passed SLC was found very few in the remote areas. Considering this view, a teacher training programme entitled as B-Level teacher training, was conducted to those who had completed class 8. The programme was introduced in Pokhara Campus in 1971. It was subsequently extended to Dhankuta, Nepalgunj (later moved to Surkhet Campus), Jumla and Birgunj Campuses. The duration of this programme was of one academic year. During the course of instruction, lecture method was extensively used. At the end of training course, teaching practice was conducted for two weeks. Evaluation of the trainees in each subject was done through internal and external evaluation system.

(iii) **On-the-Spot-Teacher Training**

In order to accomplish demands of trained teachers, one of the programmes conducted by the IOE was the On-the-spot Primary Teacher Training Programme. It was an innovative and an alternative structure designed to train chiefly the in-service primary school teachers of the urban areas (Malla, 1995). This programme was an innovative and an alternative programme in the sense that the teachers received the training in the morning or evening and still remained as full-time teacher during the training period (Shrestha, 1977), because some courses were taught in the morning and evening at a convenient place while the methodology courses were taught in their own schools. Daily lessons given in the morning or evening classes to the trainees were put into practice by the trainees in their day to day teaching under the supervision of their trainers, because a mobile team of trainers moved from school to school to supervise the planning of lessons, preparation of teaching materials and actual teaching in the classrooms by the trainees. So, under the supervision of their trainers, training was given to the teachers while
they were working in their own schools and hence, the trainees did not have to be absent from their actual teaching-work in their schools (Malla, 1995).

This programme was first started in Kathmandu in August 1972 for SLC passed in-service teachers. It was subsequently extended to different parts of the country in the following years. However, due to limitations of the IOE in supplying teacher educators and other training facilities, it could not be run in many places as demanded by the districts (Dhaubadel, 1976).

The duration of this training programme was of two semesters. A semester was seven-month long instead of being five months as in the other training programme, because training was conducted only for a few hours in the morning or evening. Training was conducted making the schools' participation in the training programme. The trainees did not require to go to other schools for teaching practice. The actual teaching in their own school in day-time was considered as the teaching practice course of the training programme. The evaluation of the trainees in each subject was done through internal and external evaluation system. Each trainee had to pass separately in internal evaluation and the final examination, which was conducted at the end of each semester.

(iv) Remote Area Teacher Training Programme

The qualified and trained teachers were very few in remote areas of Nepal. This problem was even acute in Himalayan region of Karnali Zone of the Kingdom. Thus, with a view to increase the academic qualifications of working teachers and to give them professional training, IOE designed a special type of primary teacher training programme entitled as "Remote Area Primary Teacher Training Programme" for under-qualified primary teachers of five remote districts namely Jumla, Humla, Mugu, Tibrikot and Dolpa (Dhaubadel, 1976). This programme was conducted in Jumla in February 1974 (Shrestha, 1977). Since the local teachers with the qualification of grade 6/7-pass would be eligible for applying in this programme, the duration of this training programme was maximum for the period of four years. The curriculum was designed in such a way that student-teacher received education
and training at the same time (Shrestha, 1977). In other words, this programme had a coverage of both the contents and pedagogical courses and thus, leading to SLC with teacher training (Malla, 1995).

(v) Distance Education Programme

It was realized by the concerned authorities that the growing demands of trained teachers could not be fulfilled through the campus-based training. The campus-based training was expensive for the government, because regular salary had to be given to the teachers during the training. Moreover, the teachers seemed to be reluctant to join the campus-based training as they had to leave their residence for the training (Shrestha, 1980). Hence, with a view to reduce the cost of in-service primary teacher training, to expedite the training programme, to provide training for teachers of outlying areas, to introduce alternative structure and method of teacher training as an experimental programme, an innovative primary teacher training programme entitled as 'Distance Education Programme' was introduced by the IOE for under SLC teachers working in the schools in different parts of the country in 1977. This programme was innovative in approach and different from the other teacher trainings in the sense that the teachers received the training while working in the schools. The teachers did not have to go to campuses for the training, but the training centre came to his own district to provide the training.

Admission test was held by the IOE with the help of the respective DEO. The candidates must pass the test for the enrolment in the training programme. Orientation programme was organized for about two weeks for those candidates who succeeded in the admission test. Self-learning materials were handed over to the trainees. Objectives of the programme and details of self-learning materials were explained in the orientation programme.

Each trainee received a set of self-learning materials in all subjects. The trainees were supposed to go through these materials in detail. Three months were allocated for the trainees to read these materials (Shrestha, 1980). In the mean time, contact session was also organized. The school supervisors of the respective districts worked as the instructors. Detailed discussions on
the difficulties faced by the trainees in self-learning materials were held in contact sessions (Malla, 1995). An intensive two-month practice course was conducted for those trainees, following their satisfactory performance in self-learning materials. At the end of the course, a week-long final examination was conducted. On the basis of the achievement scores obtained by the trainees, they were declared as 'passed' or 'failed.'

(vi) Radio Education Teacher Training Project (RETTP)

The concerned authority began to realize that the growing demand of trained teachers could not be met by adopting the conventional methods of teacher training only, i.e. face to face interaction in the training centres. Thus, with a view to train large number of teachers, especially for those who were financially unable to leave their homes for training and for those who were teaching in schools with just one or two teachers and were hence, unable to take leave for training, Radio Education Teacher Training Project (RETTP) was initially established within the IOE in 1978, and was shifted to the MOE in 1980 (CERID, 1988 and Barbara, 1983). The duration of training was of one academic year. Under this project, under-SLC primary teachers were trained through radio broadcast in combination with self-learning reading materials. The trainees were required to study the materials and listen to radio broadcast according to the prescribed time schedule. The teachers used to receive the training on an individual and self-monitored basis in their home-setting. Contact sessions were also arranged once a week in the Resource Centres of their respective districts. A final examination was held at the end of each academic year (Malla, 1995).

1.4.1.5 Innovative Project Phase (1981 - 1991)

While the IOE was expanding and consolidating its programmes, the seventh amendment to the Education Act (1980) was made that abolished training as a pre-requisite for getting tenure in teaching which adversely affected the overall teacher education programme in the IOE. Hence, most of the innovative programmes initiated by the IOE, were discontinued. Meanwhile, the responsibility of conducting the in-service PTT programmes
went back to MOE again in 1981. Since then the MOE has again been engaged in conducting PTT programmes through various innovative projects with the assistance of external agencies. However, there was not any specific policy regarding the PTT during this period. It was only in 1987 that the concerned authority started thinking about the policy on PTT programme, because only in this year, the government developed Basic Needs Fulfilment Programme (BNFP) with a view to meet the basic needs of the people by the year 2000. Primary education was one of the main components of this programme. So, the government set the goal of universalization of primary education by the year 2000 A.D. In this context, the MOE declared S.L.C. pass as a minimum qualification for primary school teachers and planned to provide 150 hours' PTT to all the untrained teachers by the end of 2000 A.D. A brief description of the PTT of the innovative projects being conducted in this period is made under the following headings:

(i) **Radio Education Teacher Training Project (RETTP)**

One of the projects conducted by the MOE in providing training to the primary teachers was RETTP. Though it was initiated by the IOE in 1978, it was shifted from the IOE to the MOE in 1980. So, since 1980 onwards, the MOE has been conducting RETTP with the assistance of external agencies. The first phase of this RETTP was completed in 1983, and the second phase began in 1984 for S.L.C. failures (Shrestha, 1988). In accordance with the government's decision under the BNFP in 1987, it stopped running the training for under S.L.C. teachers and started conducting 150-hour training for the teachers with S.L.C. qualification (Adhikari, 1988).

(ii) **Education for Rural Development in Seti Zone Project (ERDP)**

With a view to raise the life standard by educating people of Seti Zone in far-western region of Nepal, which represents an economically underdeveloped and socially backward area, ERDP was initiated in 1981 as a collaborative effort amongst HMG/UNESCO/UNDP/UNICEF. The project was implemented in two phases. During the first phase (1981-87), it was implemented in Doti, Bajhang and Bajura districts. During the second phase
(1987-91), the project was extended in two more districts- Achham and Kailali district. One of the major components of the project was primary teacher training under which the following two types of teacher training programmes were conducted:

**Short-Term Basic Training:** With a view to orient the working teachers about their role as change agents for rural development, to acquaint them with the methods useful for teaching at the primary level and to impart skills in preparing, using and storing the teaching/learning materials, a short-term teacher training (21 days) for the primary teachers was conducted (CERID, 1986). Since the training was conducted through participatory approach, emphasis was laid on trainees' activities in the training programme. Specifically, the main emphasis was given on the practical use of teaching techniques along with constructing necessary teaching learning materials. The training programme included teaching practice with duration of one week (CERID, 1988). Evaluation of the trainees was done on the basis of trainees' participation in the classroom, classroom observation, preparation of report, participation in developmental activities etc. In accordance with the decision made by the MOE in 1987 under the BNFP, this project also conducted 150-hour training programme for the primary teachers after revising its training curriculum (CERID, 1986).

**Long-Term Primary Teacher Training:** With a view to make the working and prospective teachers with SLC qualification able for effective teaching and to make them able to play the role of change agent for rural development, a long term (10-month) PTT programme was conducted. (CERID, 1986). During the training, each trainee had to plan daily lesson in each subject. Micro-teaching was done in each lesson (CERID, 1986). Short lectures (not more than 15 minutes), followed by a demonstration lesson, micro-teaching by trainees and group discussion were adopted as major methods of teaching. Thus, this training programme, by nature, was of activity-based type (Malla, 1995). Two weeks long teaching practice was conducted at the end of training programme. Supervision of the teaching practice was done by the Resource Persons.
(iii) Education of Girls and Women in Nepal (EGWN) Project

With a view to increase female teachers, this project, with the financial assistance of UNICEF and HMG, was started by the MOEC in 1983. It was actually the continuation of the project, "EAWEP" which was initiated in 1971. The major component of this project was PTT known as B-level teacher training programme. The duration of the training was of one academic year. Under this programme, primary teacher training was provided to those females who had completed grade 8. Later, test pass was made minimum qualification for being eligible for applying in the training programme. So, it was a pre-service and non-credit primary teacher training for females.

The training programme was conducted in five education campuses — Pokhara, Dhankuta, Nepalgunj, Jumla, and Surkhet. Lecture method was extensively used in the classrooms under this training programme. At the end of the training, teaching practice was conducted for two weeks. Evaluation of the trainees was done through internal and external system. Final written test was held in each theory subject at the end of the training.

After the decision made by the MOE that S.L.C. pass was the minimum qualification for being a primary school teacher in 1987, this programme was discontinued as it was the training programme for under S.L.C. females.

(iv) Primary Education Project (PEP)

PEP with the financial assistance of IDA/World Bank, UNICEF, and HMG/ Nepal, was started in April 1984 for five years and again extended up to July 1992. The project covered six districts — Jhapa, Dhankuta, Kaski, Tanahun, Surkhet, and Dang. The main aims of the project were to achieve a low cost quality improvement in primary education and to strengthen the administrative and technical capacity of the education system (Singh, 1988 and IEES, 1988). Since the project intended to pursue quality improvement in education through improved teaching performance of the teachers, in-service teacher training was one of the major components of the project. The following two types of training for primary teachers were conducted under the project.
Teacher Training (grade 1-3 teachers): The training on four different modules (Teaching Methodologies, Educational Materials, Learning Strategies and Learning Evaluation) were conducted at different times. The duration of these training modules ranged from 6 to 12 days.

Teacher Training (Grade 4-5 teachers): This training was conducted to those teachers who were teaching specific subjects (Mathematics, Science and English) in grade 4 and 5. The training was conducted by the subject experts of the project and by some trainers hired from outside for a short term. As discussion, demonstration, problem solving and practical activities were the major teaching techniques in the training classes, the training was of participatory approach type in its nature. In accordance with the government's decision in 1987, the project revised its curriculum and has been conducted 150-hour training for primary school teachers.

1.4.1.6 Existing Phase (1992 to yet)

As per recommendation made by the NEC which was formed in 1992, the MOE decided to conduct 10-month PTT programme. This programme was divided into four packages/ phases, each of 2.5 months' duration. The rationale for splitting the 10-month training into four packages is that the in-service teachers cannot be trained for 10 months at a stretch owing to the difficulty in managing substitute teachers in the schools (HMG/MOE, 1997). In the mean time, with a view to improve the quality of primary education through the establishment of National Centre for Educational Development (NCED) and nine Primary Teacher Training Centres (PTTCs), Primary Education Development Project (PEDP) was introduced. Prior to the establishment of the NCED, the PEDP conducted four-month training programme for the untrained primary school teachers. However, such training was conducted only once and then discontinued (CHIRAG, 1996).

After the establishment of the NCED in 1993, it started conducting 10-month PTT programme in four phases in 1994. Therefore, the existing PTT began after the establishment of the NCED (CHIRAG, ND). Distance
Education Centre (DEC), and Basic Primary Education Project (BPEP) also conducted this training programme. A brief description of PTT programmes being conducted by these three agencies is presented below:

(i) National Centre for Educational Development (NCED)

As mentioned in the appraisal of PEDP, NCED was established by His Majesty’s Government of Nepal under the MOE in 1993, with the mandate of helping to formulate teacher training policy, developing in-service training curriculum and package, and accrediting the in-service teacher training conducted by different institutions. Furthermore, the Centre has also been made responsible to run the long-term training for the primary school teachers. So, one of the main objectives of this centre is to run the PTT through its 9 PTTCs which were established in different parts of the country (CHIRAG, ND).

In accordance with the decision made by the MOE in 1992, the Centre developed the curriculum packages for each phase of 10-month training for untrained primary school teachers. It consisted of 24 courses including teaching practice on 11 different subjects with total weightage of 1320 hours of teaching. Of the four phases, the first and the third phases are related to the Nepali Language, Social Studies and Mathematics teaching whereas, the second and fourth phases are concerned with the English and Science teaching in the primary schools (HMG/MOE, 1997).

The Centre has started the training since 1994. In the beginning, NCED conducted the first phase/package of the training (2.5 months) for the teachers of 25 districts through FOE. Similarly, in the following years, it conducted the other phases of training to those who have received the previous phase of training. After the establishment of PTTCs, the NCED has been conducting the training through these centres since 1996. Generally, it conducts the training thrice a year.

The primary school teachers with the qualification of S.L.C. are eligible for the training. They are selected by the concerned District Education (DE) Offices according to the quota allotted for them by the MOE. Regarding the management of the trainers, school supervisors with the minimum
qualification of B.Ed. are deputed to PTTCs as trainers. Besides, each PTTC has some permanent trainers as well.

(ii) **Distance Education Centre (DEC)**

DEC is the continuation of the RETTP, which was started under the FOE in 1978 and later shifted to the MOE in 1980, as mentioned earlier (Barbara 1983). After the termination of second phase of this project in 1987, it became a regular teacher training programme of the MOE and was renamed as Distance Education Centre (DEC) in 1994. The main aim of this centre is to provide training to the working primary school teachers which would help in enhancing the quality of primary education (DEC, 1994).

When the centre was conducting 150-hour teacher training, as per the decision made by the MOE in 1987, the MOE decided to conduct 10-month teacher training in four phases for which curriculum packages have been developed by the NCED. Hence, DEC started revising its programme and developed an additional package of 180 hours for those who had already received 150-hour training in order to equate it with the first phase of training conducted by the NCED. It, like NCED, has also run the first phase (2.5 months) of training in its 10 programme districts since 1996. But it conducted the first phase of training upto 1997 only. At the end of 1997 next decision has been made according to which DEC had been provided with the mandate of conducting second phase of training. The decision worked only for a year and next decision has been made in 1998 according to which the DEC has been made responsible for conducting second and third phases of the training in all the districts. As per with this decision, it has been conducting second phase training in 47 out of 75 districts.

(iii) **Basic and Primary Education Project (BPEP)**

With a view to achieve low-cost qualitative improvement in primary education through teacher training, provision of supplementary materials and a support system including regular supervision of classroom instruction, PEP was initiated in 1984. Though the project was started for five years, it was
extended upto June 1992. After a critical evaluation of the PEP components, BPEP was initiated in July 1992 for a period of five years reviewing and modifying the programmes of the PEP which were not found to be successful (BPEP, 1993). The period of the BPEP has recently been extended for another five years from 1997 to 2002 with the financial assistance of HMG/Nepal, IDA, ADB, UNICEF, DANIDA and UNDP (BPEP, 1993). So, BPEP is the continuation of the PEP. It has covered 40 districts out of 75 districts of the country.

Since one of several components of the project was teacher training, it conducted training to untrained in-service teachers of its project districts. It conducted 150-hour training to the untrained teachers who passed S.L.C., as per the decision made in 1987 under the BNFP. In 1994, it conducted 180-hour training to those who had already received 150-hour training in order to equate it with the first phase of training under NCED. In 1996, the project, like NCED and DEC, conducted first phase (2.5 months) of 10-month PTT programme in all its project districts. However, it stopped running the first phase of 10-month PTT programme since the end of 1997. It has mandate to provide only 180-hour training to those who had already completed 150-hour training.

1.4.2 Problems of PTT Programmes

Nepal has experienced various types of PTT programme after the establishment of BTTC for the first time in 1947. Each PTT programme has faced some sort of problems. These problems are presented under the following headings:

1.4.2.1 Policy

- There is lack of consistent policy on teacher training. The policy has changed from time to time on an ad-hoc basis. For instance, teacher training had been made mandatory for being a primary school teacher in 1971. In 1980, new regulation of teacher training came out which deleted the mandatory training for tenure in teaching. Again, in 1987, training had been made mandatory as
entry requirement to the primary schools. Such inconsistency in the policy not only stopped to incline the percentage of the trained teachers but also adversely affected institutional development of PTT programme (HMG/MOE, 1997). Moreover, one could doubt whether the training will be mandatory for tenure in teaching in the years to come.

- Policy regarding the duration of PTT programme is found to be of fluid type, because changes in duration of PTT programme have occurred several times within a period of one and half decade. The 10 months' duration was decreased to 5 months in 1982. It has again been reduced to 150 hours in 1986. Since 1992 the duration of PTT programme as recommended by the NEC, has been made of 10 months' as it was before 1986. Such a state of frequent changes in the duration of PTT programme imply that the PTT programme still could not establish minimum expected teaching performance from the trained teachers (HMG/MOE, 1997).

- At present, there is a contradiction between the policy on the training system and the requirement for entering in teaching profession, because training has been made mandatory as entry requirement for being a primary school teacher on one hand, and on the other, there is absence of policy on conducting pre-service teacher training through governmental agencies (CHIRAG, 1996). Though private agencies, having had the approval from the NCED, could conduct pre-service PTT programme, these agencies do not receive any input from the government. It implies that the government has not encouraged to produce trained teachers through pre-service training programme.

1.4.2.2 Quality of Training

- PTT programme is not found effective. Ineffectiveness of the PTT programme is due to two main reasons (HLNEC, 1998). First, PTT programme is not found to have been developed on the basis of needs assessment. Hence, expectations and needs of the consumer agencies are not reflected in the training curriculum. Though revision has been made in the curriculum from time to time, such exercise have remained futile because of lack of recent...
literature on PIT and lack of provision of refresher training to those who were trained in 1970s (HMG/MOE, 1997). Second, the training package was not found to have been practical oriented.

- The quality of PTT programme is found to have been deteriorating. One of the main reasons of such deterioration is the qualification of the trainers (HMG/MOE, 1997). The present teacher trainers are also far less technically qualified than those who trained the primary teachers in 1980s. This is because, in 1970, the IOE employed B.Ed. holders as teacher trainers. The IOE implemented faculty development programme to raise the professional qualification of the teacher trainers. By the end of 1980, most of the teacher trainers held Master Degree and became better qualified trainers. But at the same time, the government policy made IOE stop conducting the PTT programme and the MOE itself with the trainers having B.Ed. Degree started conducting the training. Also at present, the training agencies with the trainers having qualification of B.Ed. are conducting the PTT programmes. Furthermore, the trainers are not well prepared in content matters and pedagogical aspects through the trainers' training (Malla, 1995).

- As there are various agencies (NCED, BPEP and DEC) with different strategies conducting PTT programmes, there should be a sound mechanism for controlling quality and for enhancing the effectiveness of the training programmes (CHIRAG, 1996). But such a mechanism for the quality control of all the training programmes conducted throughout the country, was lacking. The need for maintaining the uniformity in the mode of delivery had fairly remained unaddressed.

1.4.2.3 Quantity of Trained Teachers

- The goal of universalization of primary education has created a need for increased number of trained teachers for the primary schools. However, out of 91878 primary school teachers, 53.54 percent of them are still untrained (HMG/MOE, 2000). The percentage of increment of trained teachers every year is found very minimal i.e. 1.6 percent (CHIRAG, 1996). This figure
clearly revealed that the demand of fulfilling the trained teachers in the primary school is very far. Though there were three agencies using three different strategies in conducting PTT programmes while this study was initiated, the capability of these agencies in producing trained teachers was far less to meet the requirement of trained teachers. This was because, the intake capacity of these agencies was not so high. Moreover, one agency (BPEP) has already stopped conducting the training since 1997. So, the existing strategies for teacher training have not adequately addressed the present training needs (CHIRAG, 1996).

- As there is no provision of pre-service PTT programme under government and only a few private agencies (12) with a few number of trainees are conducting the training programme irregularly, the government has started to recruit the teachers without training which has resulted in rising the rate of untrained teachers in the primary schools (HMG/MOE, 1997).

1.4.2.4 Co-ordination and Management

- Since there were three different training agencies with different strategies conducting PTT programmes, there should be coordination between these agencies. On the name of coordination, all these agencies were conducting the same phase/package of training. But attention has not been given to the purpose of PTT programme and their tasks. Though there is a Teacher Training Coordination Committee, it does not have clear guidelines to perform the tasks (HMG/MOE, 1997).

- There is no suitable management mechanism at the central level and this adversely affects the implementation of the PTT programme effectively. The task of managing the PTT programmes has been shifted from Training Division of MOE to NCED, though NCED is only a training institution. A training institute can not work as an effective policy making and managing body of the MOE. So, making NCED responsible for such tasks is also a major drawback in the field of PTT sector (HMG/MOE, 1997).
1.4.2.5 Follow-up and Monitoring Mechanism

- Follow-up and monitoring of any training programme should be done in order to provide feedback for consolidating the programme. Present training system do not maintain any systematic follow-up and monitoring. Moreover, no comparative and systematic study on the effectiveness of the PTT programmes has been conducted. So, no one can say whether the PTT programmes are going in right track or not and whether the programmes are effective or not. So, the training programmes are being conducted on hypothetical basis that they might be effective (HLNEC, 1998).

1.4.2.6 Programme

- In 1992 PEDP conducted 4-month PTT programme. At present, each phase of training has duration of 2.5 months. So whether 4-month training conducted by PEDP is to be credited as first phase or second phase of existing PTT programme, has not been addressed yet (CHIRAG, 1996).

1.4.2.7 Piecemeal Training

- The present 10-month PTT programme is split into four phases. So one needs to receive the training four phases in order to complete the total duration of the training. One even needs to wait for several years to get the training of next phase after he/ she has received one phase of the training (CHIRAG, 1996). Hence, the teachers with several years of teaching experience, would have retired from their jobs before getting total course of the training.

1.4.2.8 Pre-Service and In-service

- There is no difference between the nature of pre-service and in-service training package (HLNEC, 1998). The agencies are providing pre-service training in the form of in-service training by using all the available modalities at a very high cost (HMG/ MOE, 1997). In-service teachers are being trained on pre-service training packages. Pre-service and in-service trainings are defined in terms of trainees i.e. whether they are working or not but not in terms of the training package. These facts reveal that the in-service teachers might not get the teaching skills that they actually require.
1.4.2.9 Curriculum

- The 10-month curriculum is not found suitable and appropriate for in-service training, because the curriculum is not geared to immediate professional needs of the in-service teachers. There is no justification to include Home Science in PTT curriculum. In the same way, though the subject “Evaluation Technique” is essential for the teachers, it is not a core course but rather an elective one. So, one may not learn the skills an evaluation techniques, if he/she chooses another subject instead of Evaluation Technique (HMG/MOE, 1997).

- The schools which run grades I to V with less than 5 teachers are considerable in number. The teachers of such schools are compelled to adopt multi-grade teaching without skills on such teaching. The curriculum of existing PTT programme also does not address this problem (CHIRAG, 1996).

1.4.2.10 Funding of PTT programmes

- Though conducting the pre-service PTT programme to meet the demand of increased trained teachers in the primary schools is a must, there are only 19 training centres in private sector, of which 12 have been conducting the pre-service training programmes. These training centres were not found to have been conducting training programmes regularly due to lack of financial support. The unit cost of pre-service training was found Rs. 300 while that of in-service training reached upto Rs. 5000. Though the unit cost of pre-service training was very low, the government was not funding it.

1.4.2.11 Methods of Instruction

- The purpose of teacher training is to enhance the teaching performance of the teachers for which emphasis should be given on trainees' activities during classroom instruction. But the existing modes of teacher training are lecture dominated and classroom-centered. Involvement of the schools in the training programme is found minimal (CHIRAG, 1996).

1.4.2.12 Lack of Resource Materials

- Training is effective if the trainers and the trainees are provided with adequate resource materials. But the trainers only have the curriculum for teaching and
the trainees have nothing as resource materials, which affect the effectiveness of the training programme adversely.

1.4.2.13 Evaluation Criteria

- Though the duration and the curriculum of PTT programmes conducted by different agencies were the same, there was no uniformity in evaluation criteria (test paper scoring, provision of grace mark etc.) adopted by these agencies. Each training agency has its own evaluation criteria of training which markedly vary from that of the other. So, one can not conclude that the level of two teachers trained through two different agencies will be the same.

1.4.2.14 Attitude of the Teacher Towards Training

- No priority is given to the trained ones while selecting the teachers in the schools. Similarly, there is not much difference between the salary of trained and untrained teachers. This reality adversely affects in creating the positive attitude of the teachers towards training (HLNEC, 1998).

1.5 Training Strategies

This section deals with training strategies under three headings, viz., (i) Concept of Training Strategy (ii) Identification of the Components of Training Strategy. (iii) Strategies of Existing PTT programmes.

1.5.1 Concept of Training Strategy

According to Webster's New World Dictionary of the American Language (Webster, 1968), "Strategy is the science of planning and directing large-scale military operation, specifically (as distinguished from tactics) of maneuvering force into the most advantageous position prior to actual engagement with the enemy." According to Roget's International Thesaurus (Champman, 1992), "Strategy means war tactics". Similarly, as mentioned in the Webster's Basic English Dictionary (Webster, 1990), "Strategy is the skill of using military, naval and air forces to win a war".

The above mentioned meaning implies that strategy is skilful planning to defeat the enemies in war and thus, the word "strategy" was extensively
used in military sector. It was gradually used in other areas like economics, politics and education and the other areas as well. In education, Bruner used this term, "strategy" as technique in learning and thinking (Page, 1979).

According to Urdang (1976), "Strategy means a plan, method, a series of maneuvers for obtaining a specific goal. It is, as suggested by Urdang (1991), a policy, procedure, design and scheme. Similarly, Webster's New World Dictionary of the American Language (Webster, 1968) states that it is the plan of action, which has as its objective, the solution of social problems. In this regard, Pradhan (1986) states that a strategy is an innovative approach developed to solve the problems in a question. So, it is a skilful plan, programme, procedure or method which should be directed towards the accomplishment of objectives or purposes.

Hence, strategy is a plan which must be put into action for achieving the purposes or objectives. In other words, it is the ways of solving or attacking the problem. So, the word "Strategy" is related to the question "How should the problem be solved?", because when any one gets the problem, he/she thinks of the ways of solving that problem. Here, the ways of solving the problems are considered as strategy. So, it is a design under which many activities that are to be carried out, are included for solving the problem or achieving the objectives. Thus, strategy is directed towards the pre-determined objectives. In short, it is a scheme for achieving some purposes (Guralnik, 1975), as cited by Pradhan (1986).

Pradhan (1986) states that strategy can be classified as (a) economic and (b) non-economic. Economic strategy is related to economic return whereas non-economic strategy helps in providing more and better returns. Training is a non-economic strategy.

Training strategy is a plan of action to accomplish the purpose of training. In other words, all the activities which are to be carried out for accomplishing the purpose of the training come under training strategy. Robinson (1992) as cited by Pradhan (1986) states that the major purpose of training is to achieve performance from employees at all levels. The teachers
are the key employees of the education sector. So, improving the performance of these teachers is the only one purpose of training. In other words, the main purpose of the training is to enhance the teaching performance of the teachers, which eventually helps to improve quality of education. All the activities which need to be planned and carried out in order to achieve the purpose of the training are known as training strategy. So, the training strategy answers the questions such as, who provides the training, whom to provide training, when training is conducted, where and how the training is conducted, how training should be managed. In short, training strategy is related to how all the activities concerning training are carried out to accomplish the purpose of the training. In this regard, Robinson (1992) as cited by Pradhan (1986) states that total training doctrine comes under the training strategy. Training doctrine will include its overall approach to learning and teaching. So, all procedures of activities concerning training for making teaching learning effective, come under training strategy.

Lynten and Pareek (1973) as cited by Pradhan (1986), divide training strategy into two (a) external strategy and (b) internal strategy. External strategy deals with training goals, people to be trained, and resources to be put. Internal strategy deals with levels of training, methods of training, availability of materials and evaluation. Hence, training strategy, on the whole, embodies training goals, management and level of trainers and trainees, ways of conducting training and evaluation, quality of resources etc.

1.5.2 Identification of the Components of Training Strategy

Training strategy, as mentioned above, is a plan of action which is to be put into practice for accomplishment of purpose of training. In other words, all the activities that need to be planned and carried out to achieve the purpose of training are known as training strategy. Prior to developing strategy for any training programme, it is essential to identify the components of the training strategy. So, one may be curious to know the components of the teacher training strategy. But, no such documents or reports in which a list of components of training strategy are compiled together, have been found so far.
Hence, an attempt has been made to identify the components of training strategy in Nepalese context based on some studies conducted previously, which are related to PTT programme in Nepal. A short descriptions of the studies which are related to the components of training strategy are presented below and components of the training strategy are derived at the end of this section on the basis of the discussions of these studies.

Under the BNFP in 1986, government committed to provide 150-hour training to all untrained primary school teachers by 2000 A.D. The main objectives of this training programme were to enable trainees understand the objectives of primary education, to teach the textbooks effectively with the use of instructional materials and to help them get exposures to the methods and materials that can assist in effective teaching (Shrestha, 1988). In order to meet quantitative targets and to accomplish the objectives of 150-hour training, Shrestha (1988) states:

Numerous strategies can be adopted to provide the 150-hour trainings. The major ones can be as follows:

- Programmes can be conducted during the vacation two times a year. About twenty five training centers can be started during the coming two years for trial activity. The number of training centers can be increased after the trial experience.

- Each campus of the Tribhuvan University can run the above training three times a year (if the trainers are made available). The number of trainees in each group can be determined by the size of the campus.

- A four month broadcasting supported by self instructional materials may be adequate to provide 150 hours of face-to-face training. This would mean that Radio Education Teachers Training programme has the potential to train about 3000 teachers a year if it enrolls 1000 teachers at a time.

- The district level training should be provided by a mobile team of trainers. The mobile training teams can be composed of teacher-trainers from Faculty of Education, supervisors and specialists of Ministry of Education and Culture and some selected teachers.

Above mentioned statements imply that ways of making training accessible, number of trainees as targeted for training, management of trainers, ways of conducting training, materials required for the trainees etc. come under training strategies. Moreover, RETTP which is renamed as DEC, at present, is also conceived as a training strategy.
A study conducted by CHIRAG (1996) made the following statements regarding training strategies:

The target of the training agencies for training could not meet as targeted by Eighth Five year plan (35000). Unless the capacities of the training increased and alternative approaches sought it would be impossible to train all the untrained teachers.

Existing strategies (NCED, BPEP and DEC strategies) for teacher training have not adequately addressed the present training needs. About 52% of primary teachers are untrained. In this context, what other forms of training strategies should the government develop and implement have to be come up.

Regarding DEC, the study further states:

The DEC uses radio as a medium to train teachers. It also provides self-learning materials to the participating teachers and conducts orientation programme in order to make them familiar with the training materials. Lessons are broadcast through radio 6 days a week. Resource centres are created to run contact sessions in order to discuss teachers' problems on self-study.

Thus, the above statements imply that NCED, BPEP and DEC are conceived as training strategies to meet the quantitative target of teachers to be trained. However, these strategies, as the study concluded, could not fulfill the target and hence, an alternative strategy needs to be sought.

CHIRAG (1996) further stated that though the purpose of the training was to raise the performance of the teachers, these training strategies could not help in achieving their objectives as the existing teacher training programmes are lecture-dominated and classroom-centered. The study also raised the issue about the evaluation criteria of the trainees which was different from agency to agency. Moreover, the study also pointed out that the present studies do not mention any systematic follow-up mechanism. Similarly, regarding the district coverage, this study under the "implementation strategy", states that DEC's coverage (districts) are very low compared to the other agencies. It further states that DEC does not seem to have covered the remote parts of the country (CHIRAG 1996).

Based on the existing issues on training strategies, CHIRAG (1996) presented the following recommendations:

- PTTC should be mobilized to conduct residential training of in-service teachers at a stretch in order to cover the total 10-month training content.
- The pre-service training programme should be made responsible by HSEB schools and FOE campuses.
- The projected training capacity of each of the in-service training institutions (NCED, BPEP, DEC) seems realistic and thus, should be maintained.
- By maintaining the projected capacities, it is likely that the backlog of all untrained teachers will receive at least the first package of training by the year 2000. Therefore, the policy of implementing only the first package should be prioritized.
- In order to start the second package for the completers of the first package, potential private training sectors should be mobilized.
- The in-service training institutions should be involved in providing refresher training after completing all the four training packages.
- NCED, being an umbrella institution of primary teacher training should focus on devising mechanism of conducting follow-up activities for assessing teacher's performance.
- Distance Education Centre should be directed to extending in training activities to remote areas.
- A ten-month's stretch is needed in order to equip primary schools completely with trained manpower. If the pre-service training is to be made mandatory before entering to teaching it will serve this purpose.
- BPE Master Plan (1991-2001) suggests the same strategy: pre-service at a stretch, priority of first package for all untrained in-service teachers, and initiation of other packages after all teachers receives the first package.

The above mentioned recommendations reveal that ways of making training accessible, duration of training, types of training (pre-service and in-service, continuous and phasewise), involvement of private sector in conducting training, and agencies to be involved in the training, are considered as the components of training strategy. Moreover, district coverage for the training, location of the training, sources of the trainers, procedures of training, training allowances, frequencies of the training, fixation of quota for the teachers were dealt under "Implementation Strategy" of this study. Hence, all these aspects of the training are considered as the components of training strategy.

When three agencies (NCED, BPEP and DEC) were conducting PTT programmes, a study was conducted by Malla et al. (1998). Following statements under "Training Strategy" were made in the study.

Training Strategy:

The training strategy of the primary teacher training varies by training institutions. A brief description of the strategy of each training institution is given below:
NCED and BPEP conduct teacher training following a cascade model. They have their own pool of specialists who work as master trainers. Sometimes, they also hire master trainers from the Faculty of Education.

Regarding the selection of trainers, the rapid appraisal survey indicated that the MOE appointed the principal and trainer at PTTCs; the NCED provides training to the appointed teaching staff as trainers; and most of the teachers and the trainers at PTTCs are on deputation from the DEOs. Similarly, in RCs (under BPEP), the trainers are mostly selected from the pool of experienced teachers; and the school supervisors also work as trainers.

The above mentioned statements indicate that NCED and BPEP were considered as two different training strategies. Similarly, the study also implies that the implementation procedures of training, management of master trainers and trainers, are conceived as the main components of training strategy. Furthermore, regarding the district coverage, the study stated that NCED and BPEP conducted the training only in their respective districts to avoid the risk of duplication. This statement indicates that ways of district coverage by different training agencies in conducting PTT programme is also one of the main components of training strategy.

Pradhan (1997) in his study considered NCED, BPEP and DEC as three different strategies of PTT programmes. Similarly, mode of conducting training (face to face and distance mode), ways of conducting training (on-the-spot, Mobile), teaching practice were dealt under training strategy. These facts are supported by the following statements mentioned in his study report.

...The present strategy of MOE has not been effective in training primary teachers with regards to both coverage and quality. Hence, policy-makers need rethinking of its strategies and plans.

...The target of training in 1997 is around 16,000 (the combined target of BPEP (9000), NCED (5520) and DEC (1400). The achievement of training is found usually to be less than target. Unless the HMG adopts alternative strategies, achievement will be far behind the target. Therefore, an alternative training strategy is recommended.

If alternative strategies are not adopted even with combined efforts of the three agencies BPEP, NCED and DEC in providing complete training will not meet the target by 2002 A.D.

In order to make teacher training more effective, the roles of BPEP, NCED and DEC need to be redefined, and their efforts should be orchestrated to train more teachers effectively. In their new roles, DEC will provide training on content areas through radio broadcast lessons, PTTCs will give training on pedagogical aspect and resource centres of BPEP will deal with the training on practical activities such as preparation of instructional materials and supervise practice training.
Past experiences help in guiding to develop new strategies. So the successful experiments in teacher training of the yesteryears can be reintroduced as teacher training strategies, such as mobile teacher training, on-the-spot programmes distance learning etc.

Similarly, Pradhan (1997) mentioned that the low level of achievement of primary school students is the indication of the fact that present SLC graduates who work as primary teachers do not possess adequate knowledge about the subject-matter. Hence, he suggested that HMG should think of raising the minimum qualification of primary school teachers from SLC to Intermediate Level in a phased manner. This view reveals that consideration should be given on qualification required for the trainees to be eligible to participate in PTT programme while developing training strategy.

Pradhan in his doctoral thesis (1986) put all the programmes, objectives, activities and district coverage under strategy.

Similarly, a study undertaken by PEDP (1993) considered location of training as a component of training strategy. The study made the following points regarding training strategy of NCED.

- Primary teacher training will take place at PTTCs.
- Orientation programme, workshops for PTTC professionals will take place at NCED.

The above mentioned points imply that location of training is also a component of training strategy.

The Staff Appraisal Report prepared by EHRD (1984) conceived PEP, which is now called BPEP, as a strategy. The Report proposed various activities as the strategy to accomplish the objective "a low-cost qualitative improvement in primary education" of PEP. The study undertaken by CERES (1995) explained BPEP as a strategy for quality promotion of primary education. Similarly, Bista (1995) conducted a study entitled "BPEP strategy for remote area." The study considered all the BPEP activities related to teacher training as strategy. All these statements reveal that BPEP is treated as a strategy for improvement of primary education.
From the foregoing discussion it can be concluded that various aspects of the training i.e. (i) Ways of making training accessible, (ii) Duration of training, (iii) Types of training (pre-service or in-service, continuous or phasewise, specialized or non-specialized training), (iv) involvement of private sector, (v) Involvement of agencies, (vi) District coverage, (vii) Location (Distribution) of training centres, (viii) Fixation of quota, (ix) Qualification of trainees, (x) Management of trainers, (xi) Training manuals, (xii) Implementation procedures, can be considered as the main components of training strategy in the Nepalese context. Moreover, NCED, BPEP and DEC are considered three different training strategies for conducting PTT programme in Nepal.

1.5.3 Strategies of Existing PTT Programmes

The existing PTT programme was started in 1994. The total duration of this programme, as mentioned above, is of 10 months, which is divided into four phases, each of 2.5 months' duration.

The main objective of PTT programme, at present, is to enhance the quality of primary education by providing trained teachers to all the primary schools. At present, the percentage of untrained primary school teachers was found to be 53.54 out of 91878 teachers working in the schools (HMG/MOE, 2000). Percentage of increment of trained teachers was not found to have an encouraging trend. A study conducted by CHIRAG (1996), taking the data from 1988 to 1994, revealed that only 1.6 percent of the backlog of untrained teachers, in an average, received training annually. The study further stated that if the same rate is to continue in the following years, it would take 62.5 years to train all untrained teachers existing in the year 1994/95. So, the study concluded that the existing strategies for teacher training have not adequately addressed the present training needs (CHIRAG, 1996).

Considering the positive impact of the training in the improvement of primary education, the government has given emphasis in teacher training (CHIRAG, 1996; Shrestha, 1982; and Karmacharya, 1975). Hence, Eighth-Five Year Plan (1992-1997 A.D.) targeted to train 35,000 untrained in-service
teachers (NPC, 1992). Similarly, Ninth-Five Year Plan (1998-2002 A.D.) has recently, targeted to train 50,000 untrained teachers by the end of the plan (NPC, 1998). As per with this target, the government has decided to provide 10-month training to all the teachers by 2002 A.D. (Pradhan, 1997).

In order to accomplish the objective of the programme mentioned above and to fulfil the target of training the teachers, the government adopted three different training strategies. These strategies were:

(a) Training the teachers through Training Centres, which is of conventional type.
(b) Training the teachers through Resource Centres.
(c) Training the teachers through radio broadcasting.

Three agencies (NCED, BPEP and DEC) were made responsible for conducting the training, using these three different strategies mentioned above. First, second and third strategy, mentioned above, were adopted by NCED, BPEP and DEC respectively. However, there existed inconsistency regarding conduct of different phases of training by different agencies. Similarly, the strategy regarding the number of districts to be covered by a particular agency was also found to be inconsistent. In the beginning (1994) of the ten-month training, it was decided that NCED, BPEP and DEC should cover 25, 40 and 10 districts respectively for conducting the first phase training and that NCED should conduct all the other phases of the training in all the districts. But in 1997, BPEP was made responsible to conduct only 180-hour training to those trainees who had already received 150-hour training. So, these 40 BPEP districts were covered by the NCED in conducting the first phase of training. In the same year (1997), DEC started conducting second as well as the first phase of training (Wagle, 1996).

In the beginning of 1998, the MOE again decided to conduct first and fourth phase of training through NCED and second and third phases of training through DEC in all the districts. According to this decision, the first phase of training is being conducted in all the districts by NCED only since 1998. Since this latest decision about the training has been made in an ad hoc and sporadic basis, it is doubtful that this decision will remain unchangeable. However, first
phase of the training was conducted for four, two and two year in their respective districts respectively through NCED, BPEP and DEC strategies.

Each of the training strategies which were being used by three different agencies are separately presented below:

1.5.3.1 Training Strategy of National Centre for Educational Development (NCED)

The training strategy of NCED is presented under the following headings:

District Coverage

From 1994 to 1997, NCED has conducted the first phase of training in 25 districts and the other phases in all the districts. It has conducted the first phase of training through 7 out of 9 PTTCs. One PTTC covers several districts. The number of districts covered by each PTTC was found to have ranged from 5 to 12. Since 1998 the centre, as per the decision made by the MOE, is conducting the first phase of training in all the districts.

Implementation Procedures of Training

NCED conducts the training following a cascade model. The training procedures of NCED are presented in the following figure:

![FIGURE 1.2 Procedures of Training at NCED]

To implement the training, NCED has a separate unit which is called Curriculum and Training Unit. It has a pool of training specialists who act as the master trainers (CHIRAG, ND). In addition to their own training experts,
the centre, as per need, also hires master trainers from the FOE. The centre organizes an orientation programme for the master trainers to plan and conduct the Training of Trainers (TOT). The duration of the orientation programme is not fixed. It varies according to the needs.

The master trainers of the centre conduct the TOT. The main purpose of the TOT is to provide the trainers with detail knowledge and skills on training packages and on their own specialised areas/subjects. So, the trainers receive the knowledge and skills on the content areas as well. The duration of the TOT is found to have varied from 7 to 10 days (CHIRAG, ND).

Having received the TOT, the trainers go back to their respective PTTCs and conduct the training. The training is conducted 6 hours a day and all the subjects are taught everyday, according to the prescribed daily class routine. In the training classes, emphasis is to be given on two-way interaction, activities and participation of the trainees. So, it follows the principles of face to face approach. Since, it is a residential type of training, it is training centre-based training.

Right before the final examination of the training, one-week long teaching practice is conducted. All trainees are sent to the surrounding schools of the PTTCs for actual teaching in the classrooms of the primary schools. Each trainee is required to teach with a lesson plan and instructional materials prepared by themselves. The trainers need to visit the schools from time to time and observe the classes of the trainees. Each trainee is required to secure 50 percent of total marks assigned for teaching practice.

In order to evaluate trainees' performance, paper and pencil test is conducted at the end of the training. Test-paper is developed by the centre with the help of outside experts especially the teachers of the FOE. Activities like administration of the test and scoring of the test paper are carried out by the PTTCs themselves. During the examination, observers are sent by the centre to observe the examination. Activities like scrutinisation of test paper, publication of the result and distribution of the certificate are done by the
centre itself. Evaluation of each trainee's performance is done through internal and external marks. 40 and 60 percent marks are allotted for internal and external evaluation respectively. Each trainee is required to secure 50 and 40 percent marks in internal and external evaluation in each subject (CHIRAG, ND).

Management of Trainers

Curriculum and Training Section has some permanent staff and some hired staff from outside working as the master trainers. There are nine PTTCs throughout the country which conduct the training to the primary school teachers. Each PTTC has 9 trainers and a principal who works as the training chief. Of these 9 trainers, 3-4 are permanent trainers and the rest of them are deputed from the Technical officers of Regional Director of Education (RED) and the School Supervisors of the DE offices. So, each PTTC has its own some permanent trainers while more than 50 percent of the trainers are hired from outside. The minimum qualification for the trainers is Bachelor Degree in Education.

Location of Training Programmes

Orientation programmes for the master trainers are held at the centre which helps the master trainers to plan and conduct the TOT. TOT is organized at the centre by the master trainers of the centre. The duration of TOT varies from 7 to 10 days as per needs. Training for primary school teachers is held at 9 PTTCs which are located in various parts of the country (CHIRAG, ND).

Preparation of Training Materials

With the help of the subject experts of the FOE, the training personnel of the Curriculum and Training Section of the NCED prepare the manual for the trainers. But the trainees do not receive any training manuals.

Status of Training

Since it is a residential training, the primary school teachers do not need to go to their schools throughout the training period. The training is
conducted during office time i.e. 10 am to 5 pm in summer and 10 am to 4 pm in winter. So, it is a full-time training.

**Fixation of Quota and Selection of Trainees**

The total quota of trainee-teachers for the NCED is fixed by the MOE and this quota is further distributed to 9 PTTCs. So, quota for each PTTC is fixed by the NCED. Since one PTTC covers several districts, district-wise quota is fixed by the PTTCs in the consultation with their respective districts. According to the quota fixed for each district, the DE office selects the primary school teachers for the training. Priority is given to those teachers who are permanent and who will be working for at least 5 years before they retire (CHIRAG, ND).

**Frequencies of the Training**

Since, the task of PTTCs is only to conduct the primary teachers training, it runs the training throughout the year. Generally, each PTTC conducts the training three times a year (Pradhan, 1997).

**Training Allowance**

During the training, the trainees are provided with an allowance of Rs. 50/- per day. The trainees also receive travel allowance while coming to PTTCs from other districts. Each trainee receives Rs. 45/- per month as the training allowance after the completion of the first phase of training (Malla, et al. 1998).

**1.5.3.2 Training Strategy of Basic and Primary Education Project (BPEP)**

The training strategy of BPEP is presented under the following headings:

**District Coverage**

According to the decision made by the MOE, BPEP conducted first phase (2.5 months) of the ten-month PTT in 1996 in its 40 project districts. From the end of 1997, BPEP was held no more responsible for conducting any phase of the ten-month training. It was mandated to conduct only 180-hour
training to those who had already received 150-hour training in order to equate 150-hour training with the first phase of 10-month training.

**Implementation Procedures of Training**

BPEP has conducted the training following a cascade model. The training procedures of BPEP are presented in the following figure:

![Diagram of Training Procedures at BPEP](image)

**FIGURE 1.3**

**Procedures of Training at BPEP**

To implement the teacher training, the centre has a separate unit known as Primary Teacher Training Unit (PTTU). PTTU has a pool of training specialists who organize Training of Master Trainers (TOMT) at the centre and regions. Prior to conducting the TOMT, a trial training of master trainers is conducted among the training specialists at the centre in order to identify the probable problems of TOMT. Then, the training specialists move to regions to conduct TOMT. Two training personnel (RP and/or school supervisors) from each district for the TOMT are selected who are considered as the trainees in the TOMT and who eventually work as the master trainers in their respective districts for conducting the TOT. One region covers several districts while conducting the TOMT. But it is not necessary to conduct such training in all the regions at the same time. The duration of TOMT is of 10 days. The main objective of the TOMT is to prepare master trainers in planning and conducting TOT (CHIRAG, ND).
Having received the TOMT in the region, the master trainers go back to their respective districts. These master trainers conduct the TOT in each district. In each BPEP district, there are some Resource Centres (RCs) and each of these RCs is headed by a Resource Person (RP). These RPs are the actual trainers of the primary school teachers. So, the master trainers who receive the TOMT at the regions conduct the TOT for RPs in the districts. The duration of TOT is of 10 days. The main purpose of the TOT is to prepare the trainers for planning and conducting the PTT at the RCs. Moreover, the trainers are provided with the knowledge and skills on using trainers' and trainees' manuals. So, these training manuals are extensively used during the TOT.

In each BPEP district, the RC covers some primary schools which are known as satellite schools. The primary school teachers of the satellite schools were trained by the RPs of the respective RCs. So, the RCs in the district worked as the training centres and RPs worked as trainer. But it was not necessary that each RC should have conducted the training all the time.

As mentioned above, there was only one RP in each RC. The RP of the RC where the PTT was conducted, worked as the training chief and also required to take the training classes in his own subject according to the prescribed time in the curriculum. He invited the RPs from the other RCs to take the training classes according to the need of the training. Since the RPs of other RCs had to take care of their respective RCs, they could not remain in the training centre for a period of 2.5 months. Therefore, the training schedule was so planned that a particular RP conducted the training in his/her subject everyday for 6 hours. After completing his/her training responsibility, the RP went back to his/her RC and the next trainer used to start the training (Pradhan, 1997).

Each trainee used to get the training manual during the training. The training class was conducted according to the training manual which was based on the curriculum. The training manual was extensively used during the training. In the training manual, introduction and objectives of each unit, activities to be carried out by the trainees were mentioned in detail. Hence, each trainee required to read the manual, discuss it with each other, interact
with the trainer and lastly fill-up the training manual. Emphasis was given on thinking and creativity, self learning and discussion. Hence, it was participatory or trainee-centred approach. The training under BPEP used face to face model. Similarly, the training under BPEP was RC-based, as the training was conducted at the RCs in each BPEP district (CHIRAG, ND).

At the end of the training a ten-day teaching practice was conducted. All the trainees were sent to the surrounding schools of the centre. The main aim of the teaching practice was to give practical experience to the teachers through practical activities. The main activities of the teaching practice were, preparation of lesson plan, teaching in the primary grades according to lesson plans, observation of classes by peers and trainers, planning of follow-up activities, organization of feedback session and preparation of subjective and objective test items. Evaluation of each trainee in teaching practice was done by the RP. Each trainee was required to secure at least 50 percent marks to be successful.

Regarding the final evaluation of the trainees, an Examination Board comprising of DEO, PC, RPs was formed in each BPEP district. The Board conducted the paper and pencil test in each subject for which test-paper was prepared and sent by the central office. So, the Examination Board at the district level was responsible for administering the final test. Scoring of the test paper was also done by the Examination Board. Then, the activities like scrutinisation of the test-paper, publication of the result and distribution of the certificate were done by the centre.

There was a provision of internal and external evaluation system to assess each trainee's performance. 40 and 60 percent marks were allotted to internal and external evaluation respectively. In the beginning, each trainee was required to score at least 50 percent marks combined in internal and external evaluation to be successful in the examination in each subject. But in the back paper examination in the following years, the trainees required to secure 50 percent marks separately in internal and external evaluation.
Management of the Trainers

PTTU had its own permanent staff who worked as training specialists. National and international experts were invited to train these training specialists of PTTU at the centre, as per the need of the centre. The training specialists worked as the trainers while conducting the TOMT at the regions. Two personnel (RPs and/or school supervisors) were selected from each BPEP district to work as the master trainers. So, it had also managed permanent trainers at the district level. However, the responsibilities of the RPs were not only to conduct the PTT but also to carry out all the BPEP activities in their respective RCs. So, the BPEP had prepared a cadre of trainers to train primary teachers. It had its own master trainers at the central level and the field trainers at the district level (CHIRAG, ND).

Minimum qualification of the national and international experts was not mentioned. In case of training specialist, although HMG rules required to have at least B.Ed. qualification to get entry for the jobs, most of them have had the academic background of Master Degree. Moreover, most of them received a short-term overseas training in specific areas. The trainers, however, were not adequately qualified and trained as most of the master trainers and the trainers (RPs) were reported to have B.A. and B.Ed. as their basic qualification (Pradhan, 1997).

Location of the Training

The trial training of TOMT was conducted at the centre. In order to prepare the master trainers in planning and conducting the TOT, TOMT was conducted at the centre and regions. The duration of TOMT was of 10 days. Similarly, the TOT was conducted at the district level. The main aim of the TOT was to enable the trainers to plan and conduct the PTT in their respective RCs. Moreover, a detail discussion on the trainee's manual was held during the TOT. The total duration of TOT was of 10 days. PTT was conducted at RCs of each district. So, there was one or more than one training centre in BPEP district as per the need of the district.
Preparation of Training Materials

Training manuals both for the trainers and trainees were prepared by the training specialists in consultation with National and International experts. Points were given in the training manual which facilitate in making discussion in the PTT classes. So, the training was conducted according to the training manual.

Status of Training

Training was held at the RC (Training Centre) during office time i.e. from 10-5 in the summer and 10-4 in winter. The trainees did not need to attend their schools during the training period. So, it was a full-time training.

Fixation of Quota and Selection of Trainees

The total quota for the BPEP was fixed by the MOE. Then the district-wise quota was fixed by the BPEP. According to the quota fixed by the BPEP, the DE office fixed the quota for the RCs. The selection of the teacher for training was usually done by the RPs (Malla et al., 1998).

Frequencies of the Training

Since the duration of the training was only 2.5 months, the training could be conducted more than once a year. However, conducting the PTT was one of the many activities of the RCs. So, it conducted the training only once a year.

Training Allowance

During the training period, the trainees received Rs. 50/- per day with an additional Rs. 14/- as tiffin allowance besides their regular salaries. Training manuals and the other materials were also provided by the training centre itself. After completion of the training they would receive Rs. 45/- more per month as the training allowance (Malla et al., 1998).

1.5.3.3 Training Strategy of Distance Education Centre (DEC)

The training strategy of DEC is explained under the following headings:
District Coverage

DEC has conducted first phase of training in 10 out of 75 districts of the country since 1996. According to the decision made by the MOE in 1998 it has been made responsible to conduct second and third phases of training in all the districts of the country.

Implementation Procedure of the Training

The procedures of training are presented in the following figure:

![FIGURE 1.4 Procedures of Training at DEC](image)

A separate section is created to implement the training which is known as Programme Production and Broadcasting Section. The training personnel of this section work as master trainers. The centre also hires experts from the FOE, NCED and the other concerned agencies who work as master trainers during the TOT. Prior to conducting the TOT, a one-day orientation programme for the master trainers is held at the centre. The duration of orientation programme, recently, has been extended from one to four days. The main purpose of the orientation programme is to prepare master trainers in planning and conducting the TOT.

The master trainers who participate in orientation programme move to regions to conduct TOT. One region covers several districts while conducting TOT. Headmasters and/or senior teachers of high schools are selected for the TOT who later work as trainers while conducting the training in their respective districts. These headmasters and the teachers are trained by the master trainers in TOT. The duration of TOT is of 5 days. The main purpose of
the TOT is to prepare the trainers to plan and conduct the contact session during the training period. Moreover, a detailed discussion on trainee's and trainer's manual is held during the TOT.

DEC uses radio as a medium to train primary school teachers. In other words, it conducts the training through radio broadcasts. The training lesson is broadcast 6 days a week from Sunday to Friday and two lessons a day each of 12 minutes. The total broadcasting hours is 30 minutes (from 5:30 to 6:00 pm). The training is supplemented by Self Instruction Materials (SIM) and hence, each trainee gets SIM. Each trainee is required to listen to radio according to the prescribed time and to study the SIM. So, the teachers receive the training on an individual and self-monitored basis at home setting. Prior to broadcasting the lesson, an orientation programme is conducted through radio to reinforce the concept of self study and radio based training (CHIRAG, 1996). Everyday, lessons on two subjects are broadcast for a certain period of time as mentioned in the curriculum. After the completion of lessons on these two subjects, lessons on other subjects are broadcast. Lessons are broadcast through radio for a total of 80 days.

In each DEC district, there are some temporary RCs where contact sessions are organized once a week to reinforce the training. So, it forms a cluster where contact sessions are conducted. A local headmaster or a teacher of high school who is temporarily appointed and given the TOT, work as a RP at the RC. He/she works as a trainer during the contact sessions throughout the training period. Since each RC has only one trainer, he/she needs to conduct the classes on all the subjects regardless of his/her teaching and specialized subjects during the contact session. RC is created at the local high school where the teachers do not walk more than two hours. The number of RCs may vary every year as per need of the district.

Teaching practice is conducted in the form of micro-teaching at the RCs. So, the trainees do not need to go to schools for practice teaching. The final evaluation of the trainees in teaching practice is done on the basis of
micro-teaching. At the end of the session (about 3 months for one session), the centre conducts the final examination through DE Office. Preparation of test paper, scoring of answer sheets and publication of the result are done by the centre whereas administration of the test is carried out with the help of DE Office. Paper and pencil test is conducted in each subject. The performance of each trainee is assessed through internal and external evaluation. 40 and 60 percent marks are allotted for internal and external evaluation. Each trainee is required to score at least 50 percent marks in internal and 40 percent marks in external evaluation to be successful.

Management of the Trainers

Programme Production and Broadcasting Section has some permanent training personnel who work as the master trainers during the TOT. Experts from outside (FOE, NCED, RDOE) are also hired, as per the need of the centre, who work as master trainers. But the centre does not have any permanent trainers at the district level for conducting the training. It hires headmasters and senior teachers of high schools during the training period. Most of the master trainers and all the trainers are hired on temporary basis. The minimum qualification for master trainers and trainers is Bachelor Degree in Education. However, it is found that the centre also hires some trainers who possess Bachelor Degree in other subjects rather than in Education.

Location of Training

Orientation for the master trainers is held at the centre which helps the master trainers to plan and conduct the TOT. TOT is conducted in all the regions and each region covers several districts. Primary Teacher Training is conducted through radio and hence, the primary school teachers receive the training staying in their own houses. Contact session is held once a week at each RC in the district.

Preparation of Training Materials

Self Instructional Materials (SIMs) for teachers (trainees) are prepared by the subject specialists and the outside experts. The materials are designed in
such a way that the trainees could achieve the training contents by self study. The SIMs are considered basic resources of the training programme. Similarly, radio scripts are also prepared by the subject specialists and outside experts based on the curriculum contents. The scripts are designed in the form of dialogue between an instructor and a trainee and this makes it possible for the teacher to clear the concept by listening to the dialogue. Similarly, the summary of the broadcast is also prepared. Besides, manual for the trainers is also prepared by the subject specialists and outside experts.

**Status of the Training**

The main purpose of DEC training is that the schools do not need to supplement other teachers to take classes of the teachers who attend the training class and hence, classes in their respective schools are not hampered. In other words, the teachers attend the training without leaving their schools, because the lessons are broadcast through radio from 5:30 pm to 6:00 pm. The teachers get training in their own houses. Similarly, the contact session is conducted on Saturdays. So, it is a part-time teacher training programme.

**Fixation of Quota and Selection of the Trainees**

The MOE fixes the quota of trainees to be trained through the DEC each year. The districtwise quota is fixed by the DEC. According to the quota fixed by DEC, selection of the primary school teachers for the training is done by the respective DE Offices.

**Frequencies of the Training**

Though total duration of the first phase training is of 2.5 months, it takes 3 months for broadcasting the lessons through radio. Although it can conduct training a couple of times per year, it conducts the training only once every year.

**Training Allowance**

The trainees of DEC do not get any remuneration during the training period. Instead, they require to manage the instructional materials themselves
in contact sessions. They receive Rs. 45/- as training allowance after the completion of the first phase of training.

1.5.3.4 Difference Between the Training Strategies of NCED, BPEP and DEC

The summary of the differences between training strategies of NCED, BPEP and DEC is presented in the following table:

**TABLE 1.3**

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Strategies</th>
<th>NCED</th>
<th>BPEP</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Training of Master Trainers: Provision of trial Training for Master Trainers (MT)</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.</td>
<td>Status of training specialist of Training Unit of each agency</td>
<td>MT</td>
<td>Trainers of MT</td>
<td>MT</td>
</tr>
<tr>
<td>3.</td>
<td>Nature of programme for MTs</td>
<td>Orientation</td>
<td>Training</td>
<td>Orientation</td>
</tr>
<tr>
<td>4.</td>
<td>Location of Programme for MT</td>
<td>Centre</td>
<td>Centre and regions</td>
<td>Centre</td>
</tr>
<tr>
<td>5.</td>
<td>Duration of programme for MT</td>
<td>Not fixed</td>
<td>10 days</td>
<td>1 day</td>
</tr>
<tr>
<td>6.</td>
<td>Sources of master trainers</td>
<td>FOE and training personnel of centre</td>
<td>RPs of districts</td>
<td>FOE, NCED, MOE and training personnel of centre</td>
</tr>
<tr>
<td>7.</td>
<td>Training of trainers (TOT): Location of TOT</td>
<td>Centre</td>
<td>Districts</td>
<td>Regions</td>
</tr>
<tr>
<td>8.</td>
<td>Provision of manual for trainers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>9.</td>
<td>Duration of TOT</td>
<td>7-10 days</td>
<td>10 days</td>
<td>5 days</td>
</tr>
<tr>
<td>10.</td>
<td>Trainees of TOT</td>
<td>PTTCs' Trainers</td>
<td>RPs of RCs of the districts</td>
<td>Headmasters or senior teachers of high schools</td>
</tr>
<tr>
<td>11.</td>
<td>Nature of the TOT</td>
<td>Subjectwise</td>
<td>Non-subjectwise</td>
<td>Non-subjectwise</td>
</tr>
<tr>
<td>12.</td>
<td>Primary Teacher Training (PTT): Location of PTT</td>
<td>PTTCs</td>
<td>RCs</td>
<td>Trainees' home and RC</td>
</tr>
<tr>
<td>13.</td>
<td>Nature of the training centres</td>
<td>Permanent Type</td>
<td>Permanent type</td>
<td>Temporary type</td>
</tr>
<tr>
<td>14.</td>
<td>Duration of PTT</td>
<td>2.5 month</td>
<td>2.5 month</td>
<td>12 contact sessions and 80 days through Radio</td>
</tr>
<tr>
<td>15.</td>
<td>Provision of trainees' manual</td>
<td>No</td>
<td>Yes</td>
<td>Yes (SIM, summary of radio broadcasting)</td>
</tr>
<tr>
<td>S.N.</td>
<td>Strategies</td>
<td>NCED</td>
<td>BPEP</td>
<td>DEC</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>16.</td>
<td>Sources of trainers</td>
<td>Trainers of PTTCs</td>
<td>RPs of RCs of the districts</td>
<td>Headmasters or teachers of high school</td>
</tr>
<tr>
<td>17.</td>
<td>Nature of trainers</td>
<td>Permanent</td>
<td>Permanent</td>
<td>Temporary</td>
</tr>
<tr>
<td>18.</td>
<td>Training chief and number of trainers</td>
<td>One training chief and about 9 Trainers</td>
<td>One training chief and about one trainer</td>
<td>Training chief and trainer are the same Person</td>
</tr>
<tr>
<td>19.</td>
<td>Number of training centre</td>
<td>Fixed</td>
<td>Varied annually</td>
<td>Varied annually</td>
</tr>
<tr>
<td>20.</td>
<td>Coverage of each training centre</td>
<td>5-12 districts</td>
<td>Several schools of a district</td>
<td>Several Schools of district</td>
</tr>
<tr>
<td>21.</td>
<td>Ways of conducting the training classes</td>
<td>All the subjects are taught every day according to the class routine</td>
<td>Teaching of only one subject will be continued for a certain period of time, next subject will start after completion of the previous one</td>
<td>Two lessons on two subjects are broadcasted everyday, next subjects will be started only when the first two subjects will be completed</td>
</tr>
<tr>
<td>22.</td>
<td>Nature of training class</td>
<td>Face to face interaction</td>
<td>Face to face interaction</td>
<td>Through radio</td>
</tr>
<tr>
<td>23.</td>
<td>Nature of training</td>
<td>Conventional type and training centre-based</td>
<td>Though conventional type emphasis on Activities &amp; RC-based</td>
<td>Not conventional type and Radio-based</td>
</tr>
<tr>
<td>24.</td>
<td>Training time</td>
<td>Office time (10.00 am - 5.00 pm)</td>
<td>Office time (10.00 am - 5.00 pm)</td>
<td>After office (5.30 pm - 6.00 pm)</td>
</tr>
<tr>
<td>25.</td>
<td>Training hours</td>
<td>6 hours a day</td>
<td>6 hours a day</td>
<td>Half an hour a day</td>
</tr>
<tr>
<td>26.</td>
<td>Trainees' attendance in the schools during the training</td>
<td>Not required</td>
<td>Not required</td>
<td>Required</td>
</tr>
<tr>
<td>27.</td>
<td>Status of Training</td>
<td>Full time</td>
<td>Full time</td>
<td>Part time</td>
</tr>
<tr>
<td>28.</td>
<td>Ways of conducting teaching practice</td>
<td>Actual teaching at the schools</td>
<td>Actual teaching at the schools</td>
<td>Micro-teaching among the trainees</td>
</tr>
<tr>
<td>29.</td>
<td>Evaluation of the trainees</td>
<td>- Development of test paper, scrutinisation of answer copies, result publication done by the centre. - Administration of the test and scoring of answer sheet done by the PTTCs</td>
<td>- Development of test papers, scrutinisation of answer copies, publication of result done by the centre. - Administration of the test and scoring of the answer sheet done by the DE Office</td>
<td>- Development of test paper, scoring and scrutinization of answer sheet, publication of result done by centre - Administration of the test done by the DE Office</td>
</tr>
<tr>
<td>30.</td>
<td>Fixation of quote and selection of trainees</td>
<td>- Agencywise quota fixed by the MOE - PTTCswise quota fixed by the NCED - Districtwise quota fixed by the PTTCS - Selection of trainees by the DE Office</td>
<td>- Agency wise quota fixed by the MOE - Districtwise quota fixed by BPEP - Selection of trainees by RCs</td>
<td>- Agencywise quota fixed by the MOE - Districtwise quota fixed by DEC - Selection of trainees by DE Office</td>
</tr>
<tr>
<td>31.</td>
<td>Allowance during training</td>
<td>Rs. 50 per day</td>
<td>Rs. 64 per day</td>
<td>No allowance</td>
</tr>
<tr>
<td>32.</td>
<td>Frequencies of training</td>
<td>Thrice a year</td>
<td>Once a year</td>
<td>Once a year</td>
</tr>
</tbody>
</table>
As mentioned in the above table there was a provision of trial training of Master Trainers and Training of Master Trainers under BPEP strategy. But such type of training programmes were not conducted in case of NCED and DEC strategies. Under the training strategies of these two agencies only orientation programme for the master trainers was organized. So, the duration of orientation of master trainers under these two training strategies was found different from that of the Training of Master Trainers in BPEP strategy. Similarly, the location of these orientation programmes and training of Master Trainers were also found different from each other. Moreover, management of the master trainers in each training strategy was found different.

Though TOT was organized in all the training strategies, the duration of TOT, its location, sources and management of the trainers, were found different. For instance, the trainers of PTTCs worked as the trainers in PTT under NCED strategy, whereas the RPs worked as the trainers under the BPEP strategy. In case of DEC strategy, the headmasters or senior teachers of high schools were hired to work as the trainers. So, the trainers were of permanent type under the strategies of former two agencies, whereas in DEC, the trainers were temporarily hired.

Though trained trainers conducted the PTT under the training strategies of all the agencies, ways of conducting the training, location of trainings, types of classes, training time, training hours of an agency were found different from each other.

1.6 Performance

According to New Webster's Dictionary of the English Language (Webster, 1985), the term 'performance' refers to the act or manner of exhibiting an art, skill or capacity. The dictionary further states that it is an action or thing done. The similar meaning was given by Hornby (1986). He states that performance means 'notable action' and 'achievement'. Urdang (1976) states that performance refers to a particular action, accomplishment of work. According to Benjamin (1973), performance is an activity, a behaviour in which an organism engages in a response to a task or activity which leads to
results, that modify the environment in some way. Urdang (1991) states that performance is synonymous to execution, completion, accomplishment, and behavior. All these meanings mentioned above, denote that performance is an activity carried out by an individual or group, which leads to a result. Hence, it is the accomplishment of work or acts, no matter whether the accomplishment is satisfactory or not.

In education, performance refers to the actions of a person or group when given a learning task (Page, Thomas and Marshall, 1977). So, performance is related to a learning task. Learning task is given by a teacher to his pupils. Hence, performance is related to the activity of a teacher and/or pupils. Mehta (1969) as cited by Pluangnuch (1995), explained that the word performance is a wider term which includes both the academic and curricular activities of an individual. Hence, performance, in education, denotes the academic and/or curricular activities of a teacher or pupils.

1.6.1 Teacher Performance

Teacher is one who gives knowledge and skills to his/her pupils in and/or outside the classroom for changing pupil's behaviour (Schwarz, 1995). Performance is an action or accomplishment of work carried out by an individual or group. Hence, teacher performance is the action taken or activities carried out by the teacher for changing his/her pupils' behaviour. In other words, teacher performance is the accomplishment of teacher's works or activities. Teacher's works or activities are mainly concentrated on planning and preparation of lesson, classroom management, using teaching approaches, use of instructional materials, evaluation of the pupils' learning for changing his/her pupils' behaviour. Accomplishment of these activities is related to the teacher performance. Hence, teacher performance, in general, is measured in terms of these activities. Several studies- CERID (1986 a, 1986 b, 1991, 1993), CERES (1995), Wagle (1996) and Shrestha (1997), conducted previously in Nepal, assessed the performance of teachers in terms of these activities.
According to Reddy (1998), teacher performance refers to the conduct of instruction: posing questions, providing explanations, giving directions, showing approval, engaging in the myriad instructional acts in the classroom. It is concerned to process variables rather than presage or product variables. It is acquisition of teaching skills. He further stated that teacher performance refers to what a teacher does on the job rather than to what he/she can do. It is, therefore, specific to the job situation.

Better attainment of learners is one of the indicators of quality education. Stephen (1986), EDSC (1997), Shrestha (1999) and Shrestha (1999a) also considered pupils' progress as one of the quality indicators of education. The quality of teaching is very important in promoting pupils' progress and development (Clarkson, 1988). In other words, teaching performance of the teachers should be enhanced for raising the students' achievement level.

Various efforts in form of teacher training, preparation of teacher's guide, improvement of physical facilities in the primary schools, improving supervision system and the like have been made to enhance the teaching performance of the teachers (CERES, 1995). Several evaluative studies and research have been conducted by various personnel and agencies to assess the teaching performance of teachers from time to time. The extent of effectiveness of the teaching performance of the teachers as indicated by various studies, is presented below.

Regarding the variables related to teacher for making teaching performance effective, Mali (1982) stated that the performance of teachers can be considered effective if they have a working knowledge of a subject matter, can select and use proper methods of teaching, can plan a lesson properly, are quick to respond to children's needs and interest, treat everybody equally in the class, engage children activity in the teaching profession, evaluate children continually, maintain classroom discipline and order, and are willing to help children in their difficulties. He has also identified five main factors which affect performance of trained teachers in Nepal. These factors were: (i) overcrowded classrooms, (ii) lack of educational facilities, (iii) too much class
Likewise, the extent of effectiveness of teaching performance can be enhanced by use of Curriculum Support Material (CSM). Keeping this assumption in mind, Secondary Education Development Project (SEDP) developed CSMs and used them in the schools. In order to test this assumption, EDRC (1997) conducted a study under which 54 classes of 27 teachers of 11 sample districts were observed. Performance of the sample teachers was rated in terms of five different aspects of teaching: (i) initiation of lessons, (ii) development of lesson, (iii) use of instructional materials, (iv) evaluation of students' learning and (v) closing of the lesson. The study concluded that application of CSMs enhanced performance in every aspect of classroom teaching by 23 percent 'in closing of the lesson' and by 43 percent 'in initiation of lesson.' Overall increase in teaching performance was found to be 35 percent.

CERID conducted two separate studies to compare the teaching performance of the teachers teaching in private and public primary schools. In both studies; one conducted in 1993 and the other in 1998, classroom teaching of 10 teachers each from private and public primary schools of Kathmandu valley were observed. The first study (CERID, 1993) indicated that most teachers of both types of schools used lecture and question-answer methods. Project, problem-solving, discussion, field observation and demonstration methods were used more in the private schools than in the public schools. It revealed that students' participation was more emphasized in private schools than in public schools. Similarly, more instructional materials were found to have been used in private schools than in public schools. Evaluation techniques of the private school teachers were also considered better than those of the public schools. The study concluded that the teaching performance of the private school teachers was found to be better than that of the public school teachers.
But the findings of the second study (CERID, 1998) were not found to have been similar to those of first study mentioned above. Because, the second study indicated that teaching techniques used by the teachers of these two types of schools (public and private) were not found to be very different. Most teachers of public schools used lecture method. They spent more time on using the blackboard whereas the teachers of private primary schools spent more time in checking students' work. Classroom activities in private schools were found to have been changed frequently.

In order to assess the teaching performance of female teachers trained through Equal Access of Women to Education Programme (EAWEP), CERID (1978) undertook a study in 1978. While observing the classes under this study, focus was given on: (i) command of subject matter, (ii) appropriate use of teaching techniques, (iii) use of instructional materials and (iv) overall confidence of the teachers. The study revealed that most of the sample female teachers had an adequate mastery of the subject matter they were teaching. Similarly, most of them were found to have enough confidence in their ability to teach. But, these teachers were rated poor in using instructional materials. However, the teaching performance of most of these teachers, on the whole, was found excellent.

Similar type of study, mentioned above, was carried by CERID (1986 a) in order to assess teaching performance of the B-level graduates (female trained teachers) again in 1986. Under this study, classroom observations of 69 B-level graduates of 17 districts were made. The study revealed that B-level graduates were well prepared in the content-areas that they had to teach. They carried out evaluation activities to assess students' learning at the end of the class. They were found to have used instructional materials including locally available inexpensive teaching materials. Hence, the study concluded that the teaching performance of B-level graduates, in terms of their preparation in the content-areas, use of instructional materials and evaluation techniques, was found to be fairly satisfactory.
In order to compare the teaching performance of trained teachers with that of the untrained teachers, several studies were conducted over a period of time. In this regard, Karmacharya (1982) in connection of his Ph.D. work, conducted a study under which classroom observations of 10 trained and 10 untrained teachers of Kabhre district were made. Performance of the teachers was measured in terms of planning instruction, the instructional process, use of instructional aids, questioning process, assessing student learning and student control. The investigator concluded that the differences between the performance of trained and untrained teachers were found to be insignificant. In this regard, he further concluded that the discrepancy of the performance of the trained and untrained teachers is not always the result of weaknesses of particular training programme, because teachers often do not perform as they are expected, as necessary facilities are not available or the environment is not supportive.

The above mentioned finding (i.e. the differences between the performance of trained and untrained teachers were insignificant) was not supported by the findings of the other studies conducted in the following years. Because similar type of study was launched by Mathema (1971) in connection of his M.Ed. thesis. The study concluded that unit plan was prepared by more number of trained teachers of primary schools than their untrained counterparts. The trained teachers used discussion method and question-answer method more in the classroom than the untrained teachers. Similarly, higher percentage of trained teachers used bulletin board, flannel board and pictures than untrained teachers did. But charts, maps and globes were used by higher percentage of untrained teachers. Blackboard was used almost equally by both types of teachers.

Dangol (1976) conducted a study in connection of his M. Ed. thesis in order to compare teaching method, instructional materials and evaluation system used by the trained and untrained teachers of 9 primary schools of Ilam Municipality. In this study, 27 classes (grade II) of each trained and untrained teacher were observed. The study concluded that the trained teachers used
classwork, lecture-illustration and dramatization whereas the untrained teachers used lecture method. Trained teachers used more instructional materials than their untrained counterparts did. Regarding the evaluation of students' performance, trained teachers used more evaluative activities in the classroom than the untrained teachers did.

Pradhananga (1986) also conducted similar type of study in connection of his Ph.D. work in 1986. He observed 18 classes of the trained teachers and an equal number of classes of the untrained teachers. Teaching performance of the trained and untrained teachers was measured in terms of presentation, closing, evaluation and managerial aspects. The study concluded that the trained group was superior to their untrained counterparts. The study specifically revealed that the trained teachers were better than the untrained teachers in terms of appropriate introduction of the lesson, questioning pattern, critical awareness in students, pupils' participation, pupils' responding and initiating, class management, class discipline and maintenance.

CERID (1991) undertook a study in 1991 to compare the teaching performance of trained teachers (trained through 150-hour Basic Primary Teacher Training Programme) and untrained teachers. Classroom observations of 41 trained and 43 untrained teachers of 5 sample districts were made under this study. The study indicated that the teaching performance of the trained teachers in terms of classroom management, ways of initiation of lesson, use of teaching techniques, use of instructional materials, students' participation in the classroom, evaluation techniques, was significantly better than that of untrained teachers. The study further concluded that the classroom teaching of 42.11, 55.26 and 2.63 percent trained teachers were rated as 'Very Good,' "Good" and 'Fair' respectively, whereas the number of the untrained teachers whose classes were rated as 'Very Good,' 'Good' and 'Fair' were 19.51, 75.61 and 4.88 percent.

CERID (1986b) conducted an evaluative study of PEP, taking the sample of 3 out of 6 PEP districts in 1986. One of the specific objectives of
this study was to assess the teaching performance of the teachers who received the training for 12-day grade-teaching through PEP. Teaching performance of these teachers was measured in terms of classroom management, use of teaching techniques, use of teaching aids, use of blackboard etc. The study derived the following findings: (i) classroom management was taking a new direction as teachers in many schools have adopted grade teaching, (ii) cleanliness of the classroom was appreciated, (iii) students' discipline was maintained in the classroom, (iv) the teachers changed traditional approaches in teaching, (v) teachers used locally available materials and (vi) teachers used blackboard adequately. All these findings imply that the teaching performance of the teachers was satisfactory.

CERES (1995) conducted a study to assess the teaching performance of the primary school teachers who had received the curriculum dissemination training through BPEP. Altogether 39 classes were observed in which attention was given in classroom management (seating arrangement), teaching strategies, use of instructional materials and evaluation techniques. The results of the classroom observations indicated that one-third of the total observed classes did not have proper seating arrangement as per the nature of the teaching activities carried out in the classes. Teachers' movement in these classes was found disturbed. But the remaining classes had proper seating arrangement to suit the nature of the teaching activities. Regarding teaching strategies, majority of the teachers were found to have used the question-answer technique as the most frequently used method in the class. 72 percent of the teachers initiated their teaching by basing it on the previous lessons. The study further stated that instructional materials were used in one-third of the total classes observed. Blackboard was used appropriately by most teachers. Similarly, most teachers used evaluation techniques appropriately.

A study conducted by New ERA (1995) revealed that the training provided by BPEP helped to develop professional competencies among the teachers. They were able to use new techniques of teaching. Similarly, they were found to have prepared annual work plan.
BPEP/MOE (1997) attempted to assess performance of teachers trained through BPEP for which altogether 175 classroom teaching of the teachers were observed. Performance of these teachers were assessed in terms of: (i) Planning for teaching, (ii) Instruction in classroom and (iii) Student evaluation. The study derived the following conclusions: (i) Regarding the activities related to planning for teaching, the performance of 40% teachers was satisfactory and 25% teachers was unsatisfactory. About 35% of the teachers were not found performing the activities related to planning for teaching. (ii) About 67% of the teachers were found adopting most important instructional process, however, the remaining percent of the teachers did not adopt this system. (iii) 72% of the teachers assessed the effectiveness of the lesson at the end of their classes whereas 28% did not do this activity. The teaching performance of 38.9, 53.1, and 8.0% of the teachers, on the whole, was rated as 'Fair,' 'Good' and 'Very Good' respectively.

Wagle (1996) conducted a study under which classroom observations of 100 teachers trained through NCED and 50 untrained teachers of 50 sample schools of 10 districts were made. The study derived the following conclusions: (i) The number of trained teachers who prepared lesson plan was found to be higher (29%) than the untrained ones (4%), (ii) A large portion of both trained (96%) and untrained teachers (88%) were found to have set up a suitable classroom management, (iii) The number of trained teachers who used question-answer, discussion, demonstration, role play, experiment etc. along with lecture method, was higher than that of the untrained teachers, (iv) 38 percent of the total sample trained teachers used instructional materials, whereas such untrained teachers were found to be only 13 percent. Moreover, the trained teachers used locally available materials and teacher-made type of materials whereas the untrained teachers used printed materials (ready-made materials), (v) Lastly, the number of trained teachers who did students' evaluation appropriately and provided feedback to the students while teaching, was found more than such untrained teachers.

Likewise, Shrestha (1997a) conducted a study taking the sample of 14 teachers trained through NCED and 12 untrained teachers of Kathmandu
valley in 1997 in order to compare the teaching performance of the trained and the untrained teachers. Teaching performance of both groups of teachers was measured in terms of classroom management, initiation of lesson, use of teaching techniques, use of instructional materials, and students' evaluation. The study revealed that the classroom management of both trained and untrained teachers, on the whole, was suitable on the basis of space available as per the nature of the teaching activities in most of the classes. However, in terms of initiation of lesson by the teachers and the teaching techniques used by them, the trained teachers were found better than their untrained counterparts. The number of trained teachers who presented the lessons by relating them to the previous ones was found to be more (94%) than untrained teachers. Regarding the use of instructional materials, there were only some trained teachers who used the materials. But none of the untrained teachers used the materials. Similarly, most of the trained teachers used evaluation techniques appropriately compared to the untrained teachers. Hence, the study concluded that the teaching performance of the trained teachers, on the whole, was better than that of the untrained teachers.

In order to assess teaching performance of the teachers trained through NCED, Wagle conducted two separate studies, one in 1998 and the other in 1999. The first study revealed that some teachers prepared the lesson plans for teaching. 38 percent teachers used instructional materials while teaching. Instructional qualities of 86 percent of the teachers were found effective. 79 percent teachers used appropriate teaching methods while teaching. At the end of class, lessons were summarized by majority of the teachers. Likewise, the second study conducted in 1999 showed that instructional activities of the teachers trained through NCED were found appropriate in majority of the classes. 67 percent of the teachers were found to have taught the lessons using appropriate instructional materials. Almost all the teachers (93%) used blackboard appropriate and 95 percent teachers carried out the evaluation activities properly. Similarly, the number of teachers who summarized the lesson at the end of class was found 73 percent.
Studies were carried out by Barbara (1983), Stephen (1989), Wagle, et al. (1999) and Wagle, et al. (2000) in order to assess teaching performance of the teachers trained through DEC. Barbara stated that seating arrangement of the students in the classroom was poorly managed by the DEC teachers. Similarly, presentation of the lesson of these teachers in the classrooms was not found to be satisfactory. Instructional process and teaching approaches were rated as ineffective. The DEC teachers did not perform the evaluation activities appropriately as questions were asked to only few students and almost all the questions were of recall type. Hence, the teaching performance of the teachers trained through DEC was not found satisfactory. The similar type of finding was derived by Stephen (1989). He concluded that DEC training had less impact on use of various teaching techniques in the classroom.

Regarding the performance of DEC teachers, Wagle, et al. (1999) derived the following conclusions; (i) None of the DEC teachers prepared written lesson plan. (ii) DEC training did not indicate any impact on classroom. (iii) Teaching techniques adopted by the DEC teachers were not appropriate in majority of the classes. (iv) 27 percent of the teachers did not know the use of blackboard. (v) Negligible percent of DEC teachers could perform the evaluation activities in a desired way. (vi) DEC teachers were not found to have summarized the lesson at the end of the class in 39 percent of the total classes. Hence, this study also concluded that the teaching performance of DEC teachers, on the whole, was found to be ineffective. The next study conducted by Wagle, et al. (2000) also derived the similar type of findings. The study showed that some teachers prepared the lesson plans. But more than 70 percent of the DEC teachers did not use teaching approaches effectively. Most of the teachers did not carry out evaluation activities in appropriate way. Moreover, there were, as stated by the study, some teachers who did not perform evaluation activities in order to assess students' learning in the classrooms.

Likewise, PEP (1991) undertook a study to compare teaching performance of PEP and non-PEP teachers under which classroom teaching of
60 PEP teachers and 52 non-PEP teachers was observed. The study concluded that the teaching performance of PEP teachers was significantly better than that of non-PEP teachers in terms of classroom management, planning and presentation of lessons by the teachers, using instructional materials, using teaching approaches and using evaluation activities in the classroom.

Shrestha (2000) conducted a study in order to compare teaching performance of teachers trained through NCED, DEC and untrained teachers. The study revealed that performance of teachers trained through NCED was significantly better than that of the teachers trained through DEC and untrained teachers in terms of seating arrangement, teacher's instructional qualities, teaching approaches, use of blackboard, use of instructional materials and use of evaluation techniques in the classroom.

With a view to compare teaching behaviour of trained and untrained teachers, Karmacharya, et al. (1975) conducted a study under which 56 classes of 28 teachers (both trained and untrained) of 7 districts were observed. The study revealed that 62% of the total class time was spent on teacher's activity in Nepali language classes. Though 31% of the total class time was devoted to student activity, such activity was confined to student reading book, yes or no question type. Students' activity, apart from the use of textbook, was very limited being less than 10% of the total class time in Nepali language. In case of Social Studies, 77% of the total class time was spent on teacher directed activities. The remaining percent of total classroom was spent on students' activity. However, actual students' activity, apart from using the textbook by the students was recorded only 7% of the total class time. In Mathematics classes, 38% of the total class time was spent on students' activity. The above mentioned findings revealed that students' participation was less emphasized in the classroom instruction in the primary schools.

Similarly, Shrestha (1984) also conducted a similar type of study under which classroom teaching of 97 trained and 100 untrained teachers of 12 districts were observed. The study revealed that the AR of trained and untrained teachers was 0.998 and 0.885 respectively. The difference of 0.113
in AR indicates that trained teachers used indirect teaching more by 11.3 percent than the untrained teachers. Similarly, SIR of trained and untrained teachers were calculated 0.332 and 0.305 respectively. The difference of 0.027 in SIR indicates that the time spent by the trained teachers in involving students in different activities during the teaching learning was more by 2.7 percent than the untrained teachers in the classroom teaching. However, very little difference (0.007) in TQR shows that both trained and untrained teachers used the same amount of time in asking questions and in stimulating the students to think in the classroom. On the basis of these results the researcher concluded that the trained teachers did a better job on teaching than their untrained counterparts.

Mathema (1975) conducted a study in which comparison of the teaching behaviour of primary school teachers of the NESP and Non-NESP districts was made. The study showed that primary school teachers of the NESP districts devoted more time in questioning, praising and encouraging the students, and students' speaking in social studies class of grade II than the teachers of the Non-NESP districts. Teacher talk consumed less time in the classes of teachers of the NESP districts than in those of the teachers of Non-NESP districts.

Pfau (1981) made a comparative study on Nepalese teaching and teaching in the USA. FIAC and ACI were used to collect the data on classroom teaching. He derived the following conclusions: (i) Nepalese teachers did not use the ideas of students during class. US teachers used students' ideas much more (ii) Nepalese students of grade V spent less time expressing their ideas and opinions in class than US students. (iii) Nepalese teachers lectured and talked more than US teachers. (iv) Nepalese teachers asked much shorter questions than US teachers. (v) Nepalese students gave much shorter answers than US students. (vi) Nepalese teachers gave fewer directions to students to do things. Their directions were also much shorter than those of US teachers.
Singh (1987) conducted a study in India in connection with his Ph.D. work in order to assess teaching behaviour of teachers. In this study the teachers were grouped into two: Experimental and Control group. Teachers of the Experimental group were given the training on FIACS. The study concluded that teaching behaviour of the Experimental group in relation to TT, ITT, DT, PT, PI, I/D, TR and TQ ratios was significantly different from that of the Control group.

Likewise, Vasudev (1990) conducted a study in connection with his Ph.D. work in order to compare various teaching behaviour ratios of the teachers with High and Low Democratic attitude. The study revealed that teachers with High Democratic attitude obtained significantly higher mean percentages in ITT, PT and I/D ratios whereas the teachers with Low Democratic attitude gained significantly higher mean percentage in DTT. But the mean percentages of these two groups of teachers in TT, TR, and TQ ratios were statistically, more or less, the same.

1.6.2 Student Performance

According to Good and Markel (1973), performance refers to actual accomplishment as distinguished from potential ability. It is the actions of a person or group when given a learning task (Page, Thomas and Marshal, 1979). It is equivalent to achievement (Scott, 1988). Hence, student performance is the actual accomplishment or achievement of the learning task of students which is distinguished from potential ability. Worden and Sanders (1973), and Ebel and Frisbie (1991) used student performance for student achievement. Likewise, various studies- CERID (1988a, 1988b and 1989b), PEP/MOEC (1991), Khaniya et al. (1994), New Era (1995) and BPEP (1997) used student performance for student achievement. Hence, student performance is synonymous to student achievement. Again, achievement is the learning outcome of a student. A level of achievement in the academic field of a student is included in the performance of the individual (Pluangnuch, 1995). According to Christian (1980) as cited by Pluangnuch (1995), the word performance generally indicates the learning outcome of the students. Good
(1973) refers to academic achievement as the knowledge attained or skill developed in the school subjects, usually designated by test scores or marks assigned by the teachers. Trow (1956) defined academic achievement as "the attained ability or degree of competence in school tasks usually measured by standardized test and expressed in grades or units based on Norms, derived from a wide sampling of pupil performance." According to Downie (1967), attainment or accomplishment of an individual after a period of training or learning is called achievement. Micheels and Karnes (1950) state that accomplishment in a specific area of work is called achievement. Thus, academic achievement is the competence the students show in the school subjects in which they have received instruction.

Since, one of the indicators of quality education is students' performance and the assessment of students' performance is the most important thing in order to determine whether any change in education is required or not, it is essential to assess the performance level of students from time to time (EDSC, 1997). But the practice of periodically administering standardized tests to determine students' performance is almost non-existent in Nepal (CERID/ MOEC, 1985b). However, achievement tests were designed and administered in status surveys, research and evaluative studies. The level of students' performance, as indicated by these studies conducted previously in Nepal, is presented in the succeeding paragraphs.

CERID (1982) conducted a study at national level in order to assess the achievement status of primary school completers. Under this study, a literacy test comprising questions on reading, writing and numeracy was administered to 2172 primary school completers from different parts of the country to see the extent of literacy attainment and to compare the achievement by gender, by region and by language spoken. The study revealed that the over-all mean score in the literacy test of primary school completers was 66.1 percent. Areawise (contentwise), the mean scores of the students in reading, writing and arithmetics were 87.8, 68.6 and 43.5 percent respectively. Genderwise, boys performed better than the girls in arithmetic, though not in reading and writing. Ecologically, no significant difference was found between the
performance of students living in remote and non-remote areas. Similarly, there was no wide variation in the achievement level of Nepali speakers and non-Nepali speakers.

Similarly, CERID (1985) conducted another study at national level to assess the achievement level of grade V students in different subjects. The study showed that the mean scores obtained by the students in Nepali Language, Social Studies and Mathematics were 23.32 (out of 60 points), 22.26 (out of 50), 14.91 (out of 50) respectively. The differences between mean scores obtained by boys and girls were found to be statistically significant in these subjects except in Nepali. Occupationwise, children who came from service and business occupation groups performed better than the children from agriculture occupation group in all subjects. This study further concluded that the achievement level of grade V students in all subjects, particularly in Mathematics, was found below the satisfactory level in terms of the objectives mentioned in curriculum. The main reasons of low achievement of the students were lack of qualified and trained teachers, text books, instructional materials, low efficiency of the teachers and not using appropriate teaching methods by the teachers. In order to increase achievement level of the students, the study recommended that training on preparation and use of instructional materials, and on use of appropriate teaching methods should be managed for the teachers at district level.

New Era (1995) had also conducted a study at national level under which achievement test in Nepali Language, Social Studies and Mathematics were administered to 1845 students of grade 3 of 126 schools of eight sample districts. The study indicated that the over-all mean score of students in Nepali Language was found to be 13.01 out of 36 fullmarks. In Social Studies, students obtained 16.48 mean score out of 40 fullmarks. In case of Mathematics, the mean score of students reached 15.24 out of 40 fullmarks. The study also revealed that the students of BPEP districts secured higher mean score in Nepali Language, Social Studies and Mathematics than the students of non-BPEP districts.
EDSC (1997) conducted a study at national level to assess achievement level of grade III students in Nepali Language, Social Studies and Mathematics. The study derived the following conclusions: (i) The overall mean score of grade III students in Nepali Language was 45.65 percent. Ecologically, the students of the Mountains, Hills and the Terai secured 45.32, 48.91 and 42.82 percent respectively. The differences between mean scores obtained by the students of Mountains and Hills; Mountains and Terai; and Hills and the Terai were statistically significant in Nepali Language. Similarly, NCED and BPEP students secured higher mean scores than the DEC students, (ii) In Social Studies, the students obtained 50.37 percent mean score. Students from Mountains, Hills and the Terai gained 50.36, 51.00 and 49.71 percent mean scores respectively. The result of t-test indicated that there was significant difference between the mean scores of Hills and Terai. (iii) The mean score in Mathematics was found to be 43.7 percent. Students from Mountains, Hills and Terai obtained 42.84, 45.54 and 42.59 percent respectively. The difference between the mean scores obtained by students of Mountains and Hills; and Hills and the Terai were statistically significant.

Joshi (ND) as cited by Aryal, et al. (1990) conducted a small study using a sample of 100 students studying in grade V. The students were stratified as "higher caste" and "lower caste" groups and as "Nepali speaking" and "non-Nepali speaking group." The study showed that 44 percent of higher caste students and 86 percent of lower caste students could not learn Nepali Language at the satisfactory level in grade IV. Similarly, the mean score of the higher caste students was significantly higher than that of the lower caste students. However, no wide gap was observed between the mean scores in Nepali Language obtained by Nepali speakers and non-Nepali speakers.

Regarding the educational status of Tharus (Non-Nepali speakers, one of socially and economically disadvantaged communities) and non-Tharu primary school students, CERID (1998a) conducted a study taking a sample of 24 schools from four districts. (Achievement status is used to denote pass percentage of students in the annual examination held at the end of primary level in this study). The study revealed that the achievement status of Tharus
and non-Tharu children was 67.3% and 74.90% respectively. Hence, the achievement status of the Tharu children was lower than that of students of non-Tharu communities. Genderwise, achievement status of Tharu-girls was a little bit higher (70.06%) than that of Tharu-boys (66.74%). The study further concluded that the main reasons of lower achievement of Tharu students were their cultural background, agricultural activities preventing parents to release children for education and consequently, their low interest in it and lack of exposure. Similarly, their social, physical, cultural circumstances were hardly encouraging for education.

In order to compare the performance of public school (government aided school) students and private school (government recognized school in private sector) students, a few studies were conducted. One of them is the study which was conducted by CERID in 1993. Under this study, achievement tests in various primary school subjects were administered to 200 students who completed grade V (100 from 10 public and 100 from 10 private primary schools). The study revealed that the students of private schools obtained 40.13, 16.89 and 17.09 mean scores in Nepali, Social Studies, and Mathematics respectively whereas the mean scores obtained by the public school students were found to be 29.88,13.52 and 8.89 respectively. The differences between the mean scores obtained by these two groups of students in all the subjects were found to be statistically significant. Hence, it concluded that the performance level of private school students was found to be better than that of the public school students.

Regarding the achievement status of private and public school students, Gurung (1997) made a comparison between the mean scores obtained by three different groups of grade V students of Lamjung district: (i) students of a rural public school, (ii) students of urban public schools, and (iii) students of a private school. Achievement test in Mathematics (Sets) consisting of 50 items, was administered to 23, 45 and 23 students of each category of students mentioned above respectively. The study indicated that the students of urban and rural public schools obtained 14.04 and 11.65 mean scores respectively.
But the difference between these two mean scores was found statistically insignificant. Private school students secured 27.91 mean score which was higher than that of public school students (both urban and rural) by 14.68 points. This difference was found to be statistically significant.

The above mentioned finding i.e. the performance of private school students was found better than that of the public school students, was supported by Mohammad's study (1999) which was conducted in Parsa district taking a sample of grade VIII students. Because the study concluded that private school students secured 30.50 mean score (out of 75) which was higher by 5.81 points than the general school students in Mathematics. The difference between the mean scores obtained by these two groups of students was statistically significant. Genderwise, the study concluded that the overall mean score of boys (29.50) was found significantly higher than that of the girls (25.69). Areawise, boys obtained 12.04, 9.72 and 7.74 mean scores in Arithmetic, Algebra and Geometry which were higher by 1.36, 1.48 and 0.97 percent than those of the girls respectively. The differences between the mean scores obtained by boys and girls in each area were found to be statistically significant.

For making the comparison of achievement status of the students taught by the trained and untrained teachers, a few studies were conducted. One of them was the study conducted by Khatiwada (1974). In this regard, he developed two hypotheses. They were: (i) Students' participation in Mathematics classes of trained teachers is higher than in the classes of untrained teachers. (ii) Students' achievement is greater in the classes where the activity is higher than in the classes where the activity is lower. In order to test these hypotheses, he conducted the study selecting 10 schools of Birganj town. The study indicated that student activity ratio in grade III classes of trained teachers, on an average, was 1.39 whereas such ratio in the classes of untrained teachers was found to be 0.51. The difference between these two ratios was found to be statistically significant. Similarly, the mean score of students taught by these trained teachers was found to be 17.8 out of 25 points...
whereas the students taught by the untrained teachers secured only 15.79 mean score. Students taught by the trained teachers obtained higher mean score than their counterparts taught by the untrained teachers by 2.01, which was statistically significant.

Similarly, CERID (1991) also undertook a study to compare the achievement level of students taught by trained and untrained teachers. Under this study, the centre administered Nepali Language test for grade III completers and Mathematics test for grade IV completers taught by trained teachers through 150-hour PTT programme and untrained teachers. The study revealed that the mean score of the students taught by the trained and untrained teachers in Nepali Language was, more or less, the same i.e. around 29 out of 40. However, the students taught by trained teachers obtained more mean score by 4.73 percent than the students taught by untrained teachers in Mathematics.

Achievement status of the students taught by the trained and untrained teachers was also compared by Shrestha (1997a). He stated that the mean score of the students (49.09%) taught by the teachers trained in first phase (2.5 months) of 10-month PTT programme was found to be higher than that of the students taught by untrained teachers (48.03%) by 1.06 percent in Nepali Language. Likewise, students taught by the trained teachers obtained higher mean score (41.88%) by 1.25 percent than the students taught by the untrained teachers (40.63%) in Social Studies. However, the mean scores of the students taught by trained and untrained teachers were found to be, more or less, the same in Mathematics i.e. around 41 percent.

PEP, an educational project, was implemented from 1984 to 1992 with the purpose of raising performance of primary school students along with the other purposes. In order to test whether PEP helped in raising students' performance, CERID (1989c) undertook an evaluative study of PEP. Under this study, achievement tests were administered to 166 students of three PEP districts and to 153 students of three non-PEP districts. The study revealed that PEP students of grades I, II, and III secured 74.68, 66.95 and 45.48 percent
mean scores which were higher than their non-PEP counterparts of respective grades by 10.88, 3.13 and 3.26 percent in Nepali Language. The achievement level of the students of PEP schools was found to be significantly higher than that of the non-PEP students in grade I. The mean scores obtained by the students of grade I, II, and III of PEP schools were 60.30, 47.30 and 34.70 percent whereas the students of these three grades of non-PEP schools obtained 56.67, 50.03 and 36.82 percent in Social Studies respectively. However, no significant differences were observed in the achievement level of PEP and non-PEP school students of grade I, II and III in Social Studies. In Mathematics, students of grade I, II, and III of PEP schools obtained 56.52, 44.52 and 31.27 percent whereas the students of these three grades of non-PEP schools secured 47.80, 41.0 and 32.0 percent respectively. The achievement level of the students of PEP schools was found to be significantly higher than that of the non-PEP students in grade I in Mathematics.

PEP (1992) developed a test in 1990/91 and administered it in five districts - Dhankuta, Kaski, Dang, Jhapa and Kathmandu, to assess the achievement status of grade V students. The study showed that the students of these five districts gained 48.44 mean score out of 100 in Nepali Language. The mean score in Social Studies reached up to 36.02. In case of Mathematics, the students obtained 44.43 mean score. So, the study concluded that achievement status of the grade V students was not satisfactory as the mean scores in all these subjects were found less than 50 percent.

PEP/MOEC (1991) conducted a study in order to compare the achievement level of PEP and non-PEP students. The number of PEP students who took the tests in different subjects, ranged from 285 to 399 in 6 PEP districts whereas such non-PEP students were found to have ranged from 293 to 370 in 6 non-PEP districts. The study concluded that the mean scores obtained by PEP students of grades I, II, III, IV and V were 63.93, 58.45, 60.56, 60.83 and 71.09 in Nepali Language respectively. The non-PEP students of grade I, II, III, IV and V secured 44.41, 42.07, 48.14, 45.55, and 58.82 in this subject respectively. The differences between mean scores obtained by the PEP and non-PEP students in each grade were statistically
significant. In Social Studies, PEP students of grades I, II, III, IV and V gained 72.98, 64.29, 62.64, 49.30 and 51.54 mean scores respectively, which were significantly higher than their non-PEP counterparts by 30.45, 23.67, 18.07, 19.03 and 11.84 respectively. In case of Mathematics, the mean scores of PEP students of grade I, II, III, IV and V reached 70.81, 58.80, 60.26, 47.24 and 50.38 which were also significantly higher than their non-PEP counterparts by 29.12, 21.42, 21.55, 18.23 and 14.83 respectively. These results imply that PEP helped in raising achievement levels of primary school students.

Khaniya, et al. (1993) conducted a study to determine the achievement level of grade V students of both BPEP and non-BPEP districts in various primary school subjects. (BPEP is the continuation of PEP). The study was conducted in three districts; Dhankuta, Parsa and Sindhupalchok, of which Dhankuta is long old BPEP district where BPEP was implemented from the very beginning of the project, Parsa is the new BPEP district and Sindhupalchok is the non-BPEP district. Tests were administered to all the students of these three districts. The study revealed that the students of long old BPEP district (Dhankuta) and new BPEP district (Parsa) obtained 57 and 54 mean scores out of 100 in Nepali Language respectively. (Achievement test in Nepali was not administered in Sindhupalchok district). The students of both districts, on the whole, obtained 55.5 mean score. In Social Studies, the aggregate mean score of the students of three districts was found 53.33. Districtwise, the students of long old BPEP, new BPEP and non-BPEP district secured 58, 45 and 57 mean scores respectively. Hence, the students of long old BPEP, non-BPEP and new BPEP stood first, second and third rank in obtaining the mean score in Social Studies. In case of Mathematics, the mean scores obtained by the students of long old BPEP, new BPEP and non-BPEP were 48, 40 and 51 respectively. The aggregate mean score of these three groups of students was found to be 46.35 in Mathematics. Hence, it can be concluded that long old BPEP district had the highest achievement except in mathematics. But new BPEP district could not demonstrate better than the non-BPEP district.
One of the efforts that BPEP has made for increasing performance of primary school students was opening Shishu Kaksha (pre-primary) in the primary schools in its project districts. In order to test whether this effort was fruitful or not, CERID (1998 b) launched a study to compare the achievement level of two groups of students; students with Shishu Kaksha (SK) exposure and students without SK exposure. The study indicated that there were no significant differences between the achievement level of both groups of students of grade I, II and III in any subjects (Nepali, Social Studies and Mathematics). In this regard, the study stated that all the schools with SK were not running the SK effectively due to lack of instructional and physical facilities and lack of trained teachers in SK. The study further stated that there were some sample schools with SK which were running SK effectively. While comparing the achievement level of the students of these schools with that of the students of schools without SK exposure, it was found that the achievement level of the students of such effective schools with SK exposure were higher than that of the students of the schools without SK exposure in all subjects.

In order to compare pass percentage of primary school students of PEP and non-PEP district, EU/PEP (1991) undertook a study collecting the data from 6 PEP districts and 6 non-PEP districts. The study indicated that the aggregate pass percentages of primary school children (grade I-V) of PEP and non-PEP districts in 1988/89 were found to be 64.2 and 61.6 respectively. In 1989/90, the pass percentages of PEP and non-PEP districts reached 65.51 and 64.75 respectively. Hence, PEP inputs helped in increasing students pass percentage rate in the annual examination.

The similar type of study was conducted by BPEP in 1993. This study (BPEP, 1993 a) indicated that the aggregate pass percentage (grade I-V) of boys and girls of primary schools, (133 schools of 14 BPEP districts) in 1991/92 was found to be the same i.e. 63 percent.

The similar type of the next study conducted by BPEP (1995 a), taking the data on examination results from 15 sample schools of each BPEP
districts, revealed that the pass percentages of primary school students (from grade I to V) were found 56.74, 73.79 and 74.08 in the academic year of 1992/93, 1993/94, 1994/95 respectively. The figures showed that the rate of students' pass percentage in examination was found to be increasing every year. The study further states that both genders showed a similar trend and almost equal value in each grades of all the years. In this regard, Shrestha (1999) as cited in BPEP (1999) also concluded that the proportion of grade V students passing the district-wide examination in different years has increased over the years. The pass percentage increased from the year of 1993 to 1996.

HMG, MOEC has implemented new curriculum in all the primary grades nationally, starting from grade I which was effective from the new session of 1993/94. In order to implement new curriculum effectively, BPEP has developed new curriculum materials (i.e. teachers' guides) and conducted curriculum dissemination training apart from the other types of training in its 40 project districts, by which students' achievement level was intended to increase. In order to test whether the new curriculum materials help in increasing achievement level of primary school children, several studies were conducted. One of them was the study conducted by Khaniya et al. (1994). Under this study, achievement tests in Nepali Language, Social Studies and Mathematics were administered to 397, 397 and 392 students of grade I of four BPEP districts and to 361, 172 and 174 students of the same grade of two non-BPEP districts respectively. The study concluded that BPEP students obtained 51.16 mean score which was significantly higher by 6.23 than the non-BPEP students in Nepali Language. In Social Studies, BPEP and non-BPEP students obtained 49.71 and 33.25 mean score respectively. The difference between these two mean scores obtained by two groups of students was statistically significant. Similarly, the mean score obtained by BPEP students (68.91) was found to be significantly higher than that of the non-BPEP students (57.37) in Mathematics. Hence, the study implies that the achievement level of BPEP students was significantly greater than that of the non-BPEP students.

CERES (1995) also conducted a study to assess the extent of impact of grade one new materials on students' learning. The study revealed that the
overall percentage of mean score in Nepali Language was found 67. Genderwise, boys secured 68 percent which was higher than that of the girls by 3 percent. However, this difference was not found statistically significant. In Social Studies, the students scored 70 percent. Boys obtained higher mean score by 2 percent than the girls which was statistically insignificant. In Mathematics, the over-all mean score was found 55 percent. Genderwise, boys performed better (57%) in the test than girls (49%). This difference between the mean scores of boys and girls was found to be statistically significant.

Similarly, in order to study the effect of new curriculum on the achievement of grade IV and V students, BPEP conducted two separate studies; one in 1997 and the another in 1998. Achievement tests, which were based on the learning outcomes as spelt out in the old and new curriculum of their respective grades were developed. Test items were formulated from those learning outcomes that existed in both the curricula. Under the first BPEP study (1997), the tests were administered to 954 students who were taught according to the old curriculum in 1996 and to 936 students who were taught according to the new curriculum in 1997. The study indicated that the students under old curriculum and the students under new curriculum gained 21.02 and 23.86 mean scores out of 50 points in Nepali Language respectively. The difference between mean scores obtained by these two groups of students was found to be statistically significant. In Social Studies, the mean score obtained by students under the old curriculum and the students under the new curriculum were 15.57 and 17.12 out of 50 point respectively. The difference between these two mean scores was statistically significant. Likewise, students under new curriculum obtained 14.21 mean score out of 50 fullmarks in Mathematics, which was significantly higher by 2.67 point than the mean score gained by the students under old curriculum. Hence, the study concluded that new curriculum had a positive impact on Grade IV students' achievement in all the subjects mentioned above.

Under the second BPEP's study (1998), achievement tests were administered to 935 students who were taught according to old curriculum and 875 students who were taught according to new curriculum. The study
concluded that the mean scores of students studying under new curriculum and the students studying under old curriculum were 52.41 and 47.48 in Nepali Language respectively. Hence, the students under new curriculum secured higher mean score than the students under old curriculum by 4.93 which was statistically significant. But in Social studies, the mean score of the students under new curriculum was lower than that of the students under old curriculum (38.49) by 2.62. This difference was also found statistically significant. In case of Mathematics, the mean scores obtained by the students under new and old curriculum were 26.58 and 24.14 respectively. Hence, the students under new curriculum secured significantly higher mean score than the students under old curriculum.

In order to increase the performance level of primary school students CERID and sometimes CERID in collaboration with the other agencies conducted a couple of action-research type of studies. One of these studies was "Instructional Improvement in Primary Schools" (IIPS) which was launched by CERID in two districts (Kaski and Dhanusha) in 1982 (Shrestha, 1985). This project was implemented for three years. Under this study, pre-test and post-test were administered to two groups of students: students of project schools who received various inputs and students of control schools of the sample districts. The study revealed that the students of grade I of the project schools obtained 15.42 mean gain score whereas the students of control schools secured 12.61 mean gain score in Nepali Language. In Mathematics, the mean gain scores of the students of project schools was 15.31 against 10.10 in the case of the control schools.

Similarly, regarding the achievement status of the students of IIPS project districts mentioned above, CERID, (1989b) conducted a study on cumulative achievement of grade I students of project schools over a three-year period; that is, their performance in grade I in 1983, grade II in 1984 and grade III in 1985. The study revealed that they have performed significantly better than those in the control schools. Likewise, the cumulative achievement of grade IV project school students over a two-year period revealed a significantly better performance in favour of the project schools.
IIPS project mentioned above, also concluded that students who came from Nepali speaking families achieved better marks than students coming from non-Nepali speaking families not only in Nepali but in all the other primary school subjects (CERID, 1990). It implies that the child's overall educational development is directly related to his language development. Hence, CERID designed the second phase of the IIPS project emphasizing the improvement of reading skills and language development of the primary school students coming from different language backgrounds. Under this project, a baseline survey was conducted in two sample districts. The survey study showed that the grade I, II, and III students from Nepali speaking families obtained 82, 61 and 60 mean scores which were higher by 21, 23 and 24 scores than their counterparts from non-Nepali speaking families. Areawise, Nepali speaking students of grade I obtained 80, 75 and 86 mean scores in Reading, Writing and Conversation which were higher by 19, 24 and 14 points than non-Nepali speaking students respectively. Similarly, Nepali speaking students of Grade II obtained 75, 74 and 59 mean scores in Reading, Writing and Conversation aspects of language, which were higher than the non-Nepali speaking students by 19, 37 and 21 respectively. In case of grade III students, Nepali speaking students secured 76, 66 and 59 in the three aspects of language, which were greater by 12, 35 and 24 than the non-Nepali speaking students respectively.

The another project conducted by CERID in collaboration with CTSDC and PEP for raising the performance level of primary school students was "Joint Innovative Project" (JIP). This project was implemented in four out of 6 PEP districts in 1985 (CERID/CTSDC/PEP, 1989). Tests in Nepali Language, Social Studies and Mathematics were administered to primary school students of two out of four JIP districts and two non-JIP districts to compare achievement level of these two groups of students. The results revealed that the mean scores of grades I and II students of JIP schools were 84.70 and 76.20 percent respectively which were significantly better than those of non-JIP schools in Nepali Language. In Mathematics, the mean score of grade I of JIP schools was found to be 75.05 percent which was significantly
higher than that of non-JIP schools. But no big difference was observed between the mean scores obtained by these two groups of grade II students. Similarly, in Social Studies, the mean score of JIP students of grade I reached 58.28 percent which was higher by 7.50 percent than the non-JIP students. The difference between mean scores obtained by these two groups of students was found to be statistically significant. But, the difference between the mean scores obtained by the JIP and non-JIP students of grade II was statistically insignificant.

Similarly, with a view to assess the achievement level of grade IV students of JIP districts, pre-test and post-test in Nepali Language, Social Studies and Mathematics were administered to 262 grade IV students of three JIP districts (CERID/CTSDC/PEP, 1986). The mean scores in pre-test and post-test were 21.93 (39.87%) and 35.91 (65.29%) in Nepali Language respectively. Hence, the students gained 13.98 (25.42%) mean score in the post-test of Nepali Language. The same students obtained 13.50 (23.38%) mean score in the pre-test of Social Studies and 23.19 (39.98%) in the post-test. Hence, the mean gain score was found to be 9.69 (16.70%). In case of Mathematics, the mean scores in the pre-test and post-test were 23.47 (22.79%) and 38.26 (37.15%) respectively. It reveals that the students gained 14.79 (14.36%) mean score in the post-test against the mean score obtained in the pre-test.

CERID launched a project entitled "Renewal of Primary Education" for improving the performance level of primary school students (CERID, 1989a). The study revealed that the mean scores of grades I and II students of experimental schools were 75.20 and 71.15 which were higher by 15.32 and 15.45 percent than the students of respective grades of the control schools in Nepali Language respectively. The differences between mean scores obtained by these two groups of students were statistically significant in both grades. Similarly, in Social Studies, grades I and II students of experimental schools obtained 75.0 and 57.70 percent mean scores which were statistically higher by 24.13 and 13.43 percent than the students of respective grades of the control schools. In case of Mathematics, grades I and II students of experimental
schools secured 61.25 and 48.03 percent of mean scores which were higher by 19.57 and 14.13 percent than those of the students of respective grades of the control schools. The differences between the mean scores obtained by the students of experimental and control schools were significant in both grades.

In order to assess basic competencies of 11-12 years children of Bangladesh, UNICEF/Dhaka (1992) undertook a study entitled "Assessment of Basic Competencies (ABC) of 11-12 year Children of Bangladesh". Under this study, a test consisted of Reading, Writing, Arithmetic and Life Skills, was developed and this test was administered to 2100 children (school going and non-school going) from different parts of the country. The study showed that the average mean score, on the whole, was found to be 57 percent. Areawise, the children secured 62, 52, 48 and 65 percent mean scores in Life Skills, reading, writing and arithmetic respectively.

The similar type of study (ABC) was conducted by CDC (1994) in Nepal in order to assess basic competencies of 11-12 years children of Nepal. Sample of the children comprised of school going (grades I, II, III, IV, V and V+) and non-school going children. The study indicated that mean score of school going children was found to be 73 percent. Gradewise, the children of grades I, II, III, IV, V and V+ obtained 54.17, 64.26, 70.66, 79.59, 85.22 and 87.08 percent respectively. Furthermore, the study showed a correlation between achievement and the higher level of mother's education, because the mean score of children went up from 59 to 86 percent according to their mother's level of education. The children of the mothers with higher education background secured 86 percent score whereas the children of illiterate mothers scored only 59 percent.

Wagle (1996) conducted a study using the same tool of ABC study which was developed and used by CDC, mentioned above, to find out achievement status of grade V students in Reading, Writing, Arithmetic and Life-Skills areas. This study showed that the average achievement score of the students was about 75 percent. Areawise (contentwise) the students obtained
CERID (1998a) undertook a study to assess achievement status of grade V completers through various ways in 1998. First, achievement tests in various subjects were administered to 308 grade V completers from 30 schools of 6 sample districts. The mean scores of these achievement tests were compared with the mean scores obtained by the same group of students in district wide examination. Second, another test on basic competencies developed by CDC mentioned above, was also administered to the same students in 1998. Mean score obtained by the students in this basic competencies test held in 1998 was compared with the mean score of the same basic competencies test which was held in 1996. The study derived the following conclusions: (i) Mean scores obtained by the students in the achievement test and at district level examination were 46.20 and 44.32 percent in Nepali Language respectively. But the difference between these two mean scores obtained in these two types of tests (achievement tests and district level examination) was not significant. The degree of correlation between the students' scores in these two types of tests was significant. In other words, there was a good association between these two tests. (ii) In Social Studies, the students obtained 47.0 percent mean score in the achievement test, which was higher by 2.33 percent than the mean score obtained at the district level examination. However, no significant difference between these two mean scores existed. (iii) In case of Mathematics, the students obtained 41.16 mean score at the district level examination which was higher by 9.76 percent than the mean score obtained in the achievement test. The difference between these two mean scores was statistically significant. (iv) Regarding the achievement status of students in basic competencies, students obtained about 84 percent in the basic competencies test held in 1998 which was higher by 9 percent than the mean score obtained in the same test in 1996. (v) Area wise (contentwise), the students gained 93, 71, 89 and 82 percent in Reading, Writing, Arithmetic and Life Skills in the basic competencies test held in 1998, which were higher by 8, 4, 11 and 12 percent in the same test held in 1996 respectively. From the
1998 result, it is obvious that students have improved in their study and increased their level of competency.

In order to identify the factors that influence the performance of the students, couple of studies were found to have been conducted. One of these studies was conducted by Shrestha (1982). In this regard, he concluded that there was high degree of correlation between the percentage of trained teachers and students' performance in the examination. The schools with high percentage of trained teachers performed better in SLC examination than the schools with low percentage of trained teachers. Similarly, most of the schools which performed excellently in the external examination seemed to believe in the optimum class size. The schools with very bad performance were found to have ignored the class size. This finding i.e. size of the classes makes a significant difference in the achievement of the students, was supported by Maskey (1975). He categorized 9 schools of Birganj town into three: (i) Small size class i.e. below 15 students, (ii) Medium size class i.e. 15-39 students, and (iii) Large size class i.e. 40 or more than 40 students. The study revealed that grade III students of small, medium and large size classes obtained 29.14, 26.15 and 23.06 mean scores out of 50 points in Mathematics respectively. The differences between mean scores obtained by each two groups of students were statistically significant. It implies that the students' achievement will be more if the class size is small.

One of the factors that increased the achievement level of the students was found to have been the conduct of unit test. In this regard, Panta (1978) has conducted an experimental study in grade VII of a school of Kathmandu, making two groups of students "control" and "experimental group". Unit test in Mathematics was given to experimental group while the control group did not get any sort of unit test. The investigator concluded that experimental group obtained 13.23 out of 40 points whereas the control group secured only 11.70 mean score. The difference between the mean scores obtained by these two groups was statistically significant. Hence, the investigator concluded that use of unit test result helped in enhancing pupils' achievement in Mathematics.
Similarly, use of instructional materials also helped in raising the achievement level of the students. In order to prove this hypothesis, Amatya (1978) conducted an experimental study in a primary school of Lalitpur district. Each experimental and control group consisted of 30 students of grade III. The study revealed that the experimental group who were taught fraction with use of instructional materials, achieved 13.63 mean score whereas the control group secured only 12.07 mean score. Since the difference between the mean scores obtained by the experimental and the control group was found to be statistically significant, the result was in favour of the experimental group. Hence, the investigator concluded that use of instructional materials in classroom teaching certainly helped in enhancing students' achievement.

Most of the evaluative and research studies related to achievement status of primary children revealed that the achievement level of the primary school students, particularly girls, was found below satisfactory level (CERED, 1991 a). A study conducted by CERID in 1991 identified various factors which adversely affected the achievement level of the primary school girls. These factors are: (i) physical environment of the school, (ii) curriculum and textbooks, (iii) instructional methods and materials, (iv) medium of instruction, (v) teacher competency, (vi) recruitment of female teachers, (vii) management and supervision of school activities, (viii) socio-economic status of the family, (ix) community support and value toward girl education and (x) attitude of girls toward education.

One of the factors that determine achievement status of primary school students is level of teacher's qualification. Taking this view into account, various studies- HMG/MOE (1997), Pradhan (1997), HLNEC (1998), Malla, et al. (1998) and Shrestha (1999a), recommended that the minimum qualification of primary school teachers should be of more than SLC Level. Assuming that higher level of teacher's qualification helps for increasing students' achievement level, Shrestha (1999a) conducted a study under which Mathematics achievement test was administered to three groups of students: (i) Students taught by trained teachers with SLC qualification, (ii) Students taught by trained teachers with Intermediate level qualification, and (iii) Students
taught by trained teachers with Bachelor Degree qualification. The study revealed that first, second and third group of students obtained 32.33, 37.15, and 37.48 mean score out of 60. This findings reveals that the students taught by teachers with higher level of qualification secured more mean score than the students taught by teachers with low level of qualification.

1.7 Emergence of the Problem

Teacher training is essential to enhance the quality of education including primary education. This fact was supported by several studies conducted by Karmacharya (1975), Shrestha (1982), CHIRAG (1996), HMG MOE (1997), HLNEC (1998) and Malla, et al. (1998). Primary Teacher Training (PTT) programme was first started in Nepal after the establishment of Basic Teacher Training Centre in 1947 (CHIRAG, 1996). Since then much has been done in this field and the country has experienced various types of PTT programmes. These programmes, however, were started and discontinued without any systematic study and hence, there were no empirical evidences to justify whether these programmes were appropriate or not for enhancing the quality of primary education and meeting the target of the trained teachers required for that period.

After two years of the restoration of democracy in 1990, the National Education Commission (NEC) was formed in order to bring qualitative improvement in education (NEC, 1992). The Commission recommended 10-month PTT programme instead of 150-hour training which was being conducted during that time. As recommended by the Commission, the MOE has decided to conduct 10-month PTT programme, which is divided into four phases/packages of 2.5-months' duration each (CHIRAG, 1996 and Malla, et al., 1998). Since then, 10-month PTT programme has been in operation in the country till now. The main objective of the PTT programme is to enhance the quality of primary education through training (NEC, 1992). In other words, the training programme aims at improving the performance of teachers and students by providing trained teachers in the schools.
The number of primary school teachers was 91878 in 1998, out of which 49195 (53.54%) were untrained (HMG/MOE, 2000). The government has targeted to train these untrained teachers by 2002 A.D (Pradhan, 1997).

The government has adopted three training strategies in order to meet the quantitative target of training untrained teachers and to accomplish the objective of PTT programme as mentioned above. The first training strategy is of conventional type in the sense that it uses face to face interaction among trainers and trainees. Training is conducted at the Primary Teacher Training Centres (PTTCs) and each of these PTTCs covers several districts. So, it is PTTC-based training. National Centre for Educational Development (NCED) was established to execute this training strategy. This strategy is, therefore, considered as NCED strategy. NCED started giving the first phase of the 10-month training to untrained teachers in 25 out of 75 districts of the country in 1994, and is still continuing it. Besides this, the Centre has also implemented the fourth phase of the training.

The second type of training strategy is of conventional type too. Training, however, is conducted at the Resource Centres (RCs) which are several in number in each district. So, it is RC-based training. As BPEP was made responsible to use this training strategy, it is popularly known as BPEP strategy. Through this strategy, the first phase of the 10-month training was conducted in 1996 and covered 40 districts which were not included under NCED strategy. BPEP, however, dropped conducting any phase of the 10-month training and started conducting other short-term trainings since the end of 1997.

According to the third training strategy, training is conducted through radio. Under this strategy, the schools need not release their teachers to go for training, as it is basically a radio-based training. Distance Education Centre (DEC) was made responsible for adopting this training strategy. The Centre conducted the first phase of the 10-month training in the remaining 10 out of 75 districts in 1996. But DEC stopped conducting the first phase and started second and third phases of the training since the end of 1997.
Three agencies (NCED, BPEP and DEC) mentioned above, through their respective strategies had been conducting the first phase of the 10-month training when this study was initiated in 1996. They conducted the first phase of the training for several times. At present, first and fourth phases of the training are being conducted through NCED strategy and second and third phases of the training through DEC strategy. As regards BPEP, it is no more responsible for conducting any of the four phases of the 10-month training. But no empirical answer is available yet as to why BPEP and DEC stopped conducting the first phase of the training and why only NCED has been continuing it. This is a big question which has arisen in the field of PTT programme in Nepal.

The training strategy of one agency mentioned above was different from that of the other strategies adopted by the other agencies in terms of implementation procedures of training, ways of conducting various levels of training (TOMT, TOT and PTT), district coverage, location of training, management of trainers, preparation of training materials, fixation of quota, teaching practice, evaluation, status of training (full time or part time), frequencies of training, training allowances etc. However, the main objective of all these training strategies is to improve the teaching performance of teachers which would help increase the achievement status of students (HMG/MOE, 1997; NCED, 1995; BPEP/MOE, 1995a; CHIRAG, ND). But no one has been able to justify which one of the three training strategies is more effective in enhancing the teaching quality of teachers and increasing the achievement level of students, as no study has been conducted so far to compare the effect of these three training strategies. Thus, question regarding which one of these three training strategies is effective in terms of improving the performance of teachers and students, is still unanswered.

Nepal has tried various types of PTT programmes from 1947 to the present time. These training programmes conducted at different periods of time were different in terms of their duration, types (pre-service and in-service, continuous or phasewise, specialized or non-specialized), minimum qualification of the trainees for being eligible to participate in PTT
programme, management of the trainers, implementation procedures of the training, teaching practice, evaluation system of the trainees etc. Hence, several questions like, "How should the training be made easily accessible to all untrained teachers as early as possible?", "What should be the duration of PTT programme?", "What type of training should be conducted?", "Which agency/agencies should be involved in conducting such training?", "Where should the training be conducted?", "How should the trainers be managed?", "What should be the mode of delivery of the training?" "What should be the minimum qualification for trainees to participate in PTT programme?", "How should they be selected for the programme?", "How should teaching practice be conducted?", "How should the final evaluation of the trainees be done?" etc. have been raised. All these questions are related to training strategy. In this regard, some studies—CHIRAG (1996), Pradhan (1997) and Malla, et al. (1998), have concluded that the existing training strategies adopted by NCED, BPEP and DEC could not meet the quantitative target of training all untrained teachers and could not accomplish the objective of PTT programme also. These studies suggested that an alternative strategy should be developed to meet the target. But they did not recommend any training strategy for PTT programme in Nepal. Similarly, no study has been conducted, so far, to justify an effective and appropriate training strategy for PTT programme in Nepal. Hence, the question as to what type of training strategy is suitable and practicable for the PTT programme still remains unanswered.

The aforementioned problems, findings of the previous studies and the questions regarding the training strategy demand that a comprehensive study be conducted in order to compare the effect of the training strategies adopted by NCED, BPEP and DEC on the performance of teachers and students, and to propose a strategy for improving the PTT programme in Nepal.

1.8 Statement of the Problem

Based on the background and problem mentioned above, the present study is entitled "A Study of Effect of Various Teacher Training Strategies on Performance of Teachers and Students of Primary Schools of Nepal: A Proposed Training Strategy"
1.9 Objectives of the Study

The objectives of the present study are enumerated below:

1. To compare performance of teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language, Social Studies and Mathematics with respect to:
   - Seating Arrangement
   - Teacher's Planning and Presentation
   - Teacher's Instructional Qualities
   - Use of Instructional Materials
   - Use of Blackboard
   - Teaching Approaches
   - Students' Evaluation
   - Summing up of Lesson

2. To compare teaching behaviour of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language, Social Studies and Mathematics in relation to the following teaching behaviour ratios:
   - Teacher Talk (TT)
   - Indirect Teacher Talk (ITT)
   - Direct Teacher Talk (DTT)
   - Pupil Talk (PT)
   - Pupil Initiative (PI)
   - Indirect to Direct (I/D)
   - Teacher Response (TR)
   - Teacher Question (TQ)

3. To compare the achievement level of grade V students taught by the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language, Social Studies and Mathematics.

4. To propose a strategy for improvement of Primary Teacher Training (PTT) programme in Nepal in terms of:
1.10 Hypotheses of the Study

The following hypotheses were formulated for the study:

1. There are no significant differences in the performance of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language with respect to:
   1.1 Seating Arrangement
   1.2 Teacher's Instructional Qualities
   1.3 Use of Blackboard
   1.4 Teaching Approaches
   1.5 Evaluation of Students

2. There are no significant differences in the performance of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Social Studies with respect to:
   2.1 Seating Arrangement
   2.2 Teacher's Instructional Qualities
   2.3 Use of Blackboard
   2.4 Teaching Approaches
   2.5 Evaluation of Students

3. There are no significant differences in the performance of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Mathematics with respect to:
   3.1 Seating Arrangement
   3.2 Teacher's Instructional Qualities
3.3 Use of Blackboard
3.4 Teaching Approaches
3.5 Evaluation of Students

4. There are no significant differences in teaching behaviour of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language in relation to the following teaching behaviour ratios:

4.1 Teacher Talk (TT)
4.2 Indirect Teacher Talk (ITT)
4.3 Direct Teacher Talk (DTT)
4.4 Pupil Talk (PT)
4.5 Pupil Initiative (PI)
4.6 Indirect to Direct (I/D)
4.7 Teacher Response (TR)
4.8 Teacher Question (TQ)

5. There are no significant differences in teaching behaviour of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Social Studies in relation to the following teaching behaviour ratios:

5.1 Teacher Talk (TT)
5.2 Indirect Teacher Talk (ITT)
5.3 Direct Teacher Talk (DTT)
5.4 Pupil Talk (PT)
5.5 Pupil Initiative (PI)
5.6 Indirect to Direct (I/D)
5.7 Teacher Response (TR)
5.8 Teacher Question (TQ)

6. There are no significant differences in teaching behaviour of the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Mathematics in relation to the following teaching behaviour ratios:

6.1 Teacher Talk (TT)
6.2 Indirect Teacher Talk (ITT)
6.3 Direct Teacher Talk (DTT)
6.4 Pupil Talk (PT)
6.5 Pupil Initiative (PI)
6.6 Indirect to Direct (I/D)
6.7 Teacher Response (TR)
6.8 Teacher Question (TQ)

7. There are no significant differences in the achievement level of grade V students taught by the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Nepali Language.

8. There are no significant differences in the achievement level of grade V students taught by the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Social Studies.

9. There are no significant differences in the achievement level of grade V students taught by the teachers trained through various training strategies adopted by NCED, BPEP and DEC in Mathematics.

1.11 Delimitation

The following are the delimitations of this study:

1. It is a comparative study regarding the effect of NCED, BPEP and DEC training strategies on teaching performance and teaching behaviour of teachers and achievement level of grade V students. Though NCED was conducting all phases (four phases) of the PTT programme, BPEP and DEC were conducting only the first phase of such training programme when this study was initiated. Hence, this study was confined to the study of the first phase of PTT programme for the purpose of comparison.

2. Since the training package of the first phase consists of only three teaching subjects, i.e. Nepali Language, Social Studies and Mathematics of primary schools, the trained teachers of the first phase were supposed to be teaching the said subjects. Hence, achievement tests for the students of grade V were administered only in these three subjects for the purpose of this study.

3. The effect of teacher training should be reflected in various aspects i.e. enrolment, retention, promotion, reduction of repetition rate, teaching performance, teaching behaviour of the teachers and achievement level of the students. However, this study focused only on teaching
performance, teaching behaviour of the trained teachers, and the achievement level of grade V students taught by them.

4. In order to collect the quantitative data required for the accomplishment of objective no. 2 of this study, Flanders' Interaction Analysis Category System (FIACS) was used. Though Flanders developed various behavioural ratios to measure the teaching behaviour of the teachers, only 8 behavioural ratios were calculated in this study. It is because comparison of the teaching behaviour of teachers trained through NCED, BPEP and DEC training strategies, was only one of the several other objectives of the present study. These ratios were; (i) Teacher Talk, (ii) Indirect Teacher Talk, (iii) Direct Teacher Talk, (iv) Pupil Talk, (v) Indirect to Direct Ratio, (vi) Pupil Initiative Ratio, (vii) Teacher Response Ratio, (viii) Teacher Question Ratio.

5. In Nepali Language Achievement Test, items were not developed from listening and speaking aspects. It is because test on these aspects, particularly speaking, had to be administered to the students individually which was not possible in the present study. Hence, items were drawn from reading comprehension and writing aspects only.

6. Though teacher training programme covers many aspects, only 12 aspects of training, which are conceived as training strategy in the present study, are dealt under this study. These components were (i) Accessibility of Training (ii) Duration of Training (iii) Types of Training (iv) Involvement of Private Sector (v) Involvement of Agencies (vi) District coverage (vii) Distribution of Training Centers (viii) Fixation of Quota (ix) Qualification and Selection of Trainees (x) Management of Trainers (xi) Training Manuals (xii) Implementation Procedures.

1.12 Significance of the Study

The history of Primary Teacher Training (PTT) in Nepal is more than five decades old. Several studies (Pradhanang, 1986; CERID, 1991; Wagle,
1996 and Shrestha, 1997) proved that the performance of trained teachers was better than that of the untrained ones. Educational statistics of 1998 showed that 53.54 percent of the total primary school teachers without any sort of training were working in schools (HMG / MOE, 2000). Three different agencies with three different training strategies were conducting 10-month PTT programme in order to train these teachers when this study was initiated in 1996. The main objective of the 10-month PTT programme was to improve the performance of teachers and students (NEC, 1992). A huge amount of resources in terms of money, manpower, time and other inputs have been invested in the 10-month training conducted through these three different strategies. But these agencies through their respective training strategies were conducting the 10-month training without taking any account of the extent of effectiveness of these training strategies in terms of improving the performance of teachers and students. Moreover, there was a lack of empirical evidences as to whether the training strategies were effective in improving the teachers' and students' performance. It was in this context that the present study was conducted for assessing the effect of these three training strategies on the performance of the teachers and students. This study, therefore, will certainly be meaningful and useful to all the concerned personnel and agencies, as it will give a clear picture to what extent each training strategy affects the performance of both teachers and their students. Moreover, this study will be useful, particularly, to NCED, BPEP and DEC personnel, because improvement in their programmes can be made on the basis of the findings of this study.

The significance of the study lies on the fact that it proposes an appropriate training strategy under which questions regarding types and duration of training, private sector's involvement, level of training, agencies to be involved in conducting PTT programme, coverage of districts by each training agency, selection of trainees, management of trainers, implementation procedures etc., are answered. The proposed training strategy can either be adopted and used by the concerned agencies or can be utilized by planners and
programmers to develop a detailed, specific and comprehensive training strategy for PTT programme in Nepal. The study will be a great help for the government to meet the target of training all untrained teachers in the one hand, and to accomplish the objectives of PTT programme on the other. Moreover, the training strategy proposed in this study could be an important area for further research.