REPORT OF
THE NATIONAL EDUCATION COMMISSION, 1992

National Education Commission
Keshar Mahal, Kathmandu, Nepal
1992
COMPOSITION OF THE
NATIONAL EDUCATION COMMISSION

1) Mr. Govinda Raj Joshi Chairman
Minister for Education and Culture and Social welfare

2) Dr. Trailokya Nath Upraity. Vice-Chairman
Educationist.

3) Dr. Bal Gopal Baidya Member
Member. National Planning Commission

4) Mr. Kellar Bhakta Mathema Member
Vice-Chancellor. Tribhuvan University

5) Mr. Shrikrishan Acharya. Member
Vice-chancellor. Mahendra Sanskrit University

6) Dr. Ishwar Prasad Upadhvaya Member
Secretary. Ministry of Education and Culture

7) Mrs. Suprabha Ghimire Member
President, Nepal University Teachers’ Association

8) Dr. Suresh Raj Sharma Member
Vice-Chancellor. Kathmandu University

9) Dr. Puma Kanta Adhikari Member
Educationist

10) Dr. Ramavat Yadv Member
Director. Curriculum Development Centre. Tribhuvan University

11) Dr. Shesh Kanta Aryal. Member
Reader. Institute of Medicine

12) Mr. Hikmat Singh Bhandari. Member
Lecturer. Saraswati Multi-Purpose Campus

13) Mr. Stalarshau Risal. Member
Registrar. Tribhuvan University

14) Mr. Chandra Shekhar Thakur. Member
Head Master, Juddha Secondary School. Uoto-

15) Dr. Lekh Nath Belhase. Member
Educationist.

16) Mr. Puspa Bahadur Shrestha Member Secretary
National Education Committee
The Rt. Hon'ble Prime Minister Girija Prasad Koirala  
Office of the Prime Minister  
Singha Durbar, KATHMANDU

Your Excellency,

It gives me great pleasure to place before you this Report on behalf of the National Education Commission.

As Your Excellency will recall, this Commission was appointed who in response to the felt need of giving a new direction to the educational system in the changed context of the country, and it remained in office for 9 months to draw up this Report.

Compared with the scope of its work, the time-frame allocated to the Commission was not quite adequate. Nevertheless, it succeeded in presenting its recommendations after analyzing different aspects of the national education scene, as it exists now, and the problems confronting it. These recommendations are based on the studies, mounted by the Commission at various levels, on the conclusions, emerging from discussions and seminars, and on the views and suggestions put forward by persons, eminent in the field of education.

The following are some of the salient features of this Report:

1) While determining the goals of education, the fundamental rights and the directive principles of the State, as laid down in the Constitution of the Kingdom of Nepal, 1990, have been constantly kept in view.

2) Emphasis has been laid on non-formal as well as formal education in order to bring its blessings within the reach of all.

3) Non-formal education has been made complementary to its more formal aspect, and technical and vocational education has been incorporated in the main stream of the educational process by including it in the curricula of the lower classes.

4) The existing educational system of Nepal has been re-structured, taking into consideration the current trends in neighbouring countries.

5) It has been recommended that the facilities for higher education be de-centralized, and that universities, campuses, and other institutes of higher studies be set up in different parts of the country.

6) It has also been recommended that the privatization of education be encouraged, as it is a recipe for sparking off popular participation, ensuring competitiveness, stimulating innovations, and bringing about diversification and expansion.
Basically, this Report has confined itself to policy matters only. and, as it will be apparent, steps should be taken to devise and implement programmes in line with them as soon as possible.

In conclusion. please allow me to express heart-felt gratitude on behalf of the Commission and on my own for entrusting us with the solemn responsibility cl studying different aspects of national education and making recommendations lit reform in such a field of crucial and critical importance.

Govinda Raj Joshi
Minister for Education Culture. and Social Welfare.
Chairman National Education Commission
# TABLE OF CONTENTS

PREFACE .......................................................................................................................... 6  
TERMS OF REFERENCE ................................................................................................. 6  
1. NATIONAL GOAL, STRUCTURE AND POLICY OF EDUCATION ..................................... 1  
2. PRIMARY EDUCATION ............................................................................................... 1  
3. SECONDARY AND HIGHER SECONDARY EDUCATION .................................................. 33  
4. HIGHER EDUCATION (GENERAL) ................................................................................ 45  
APPENDIX .......................................................................................................................... 70  
The University Grants Commission .................................................................................. 70  
5. Higher Education (Technical) ..................................................................................... 72  
6. SANSKRIT EDUCATION .............................................................................................. 89  
7. TECHNICAL AND VOCATIONAL EDUCATION ........................................................... 96  
8. TEACHER TRAINING ..................................................................................................... 119  
9. SPECIAL EDUCATION ................................................................................................ 1  
10. NON-FORMAL EDUCATION ......................................................................................... 146  
II. FINANCIAL MANAGEMENT OF THE EDUCATIONAL SECTOR ..................................... 1  
APPENDIX .......................................................................................................................... 171  
Estimation of Probable Outlays on Education .................................................................. 171  
12. EDUCATIONAL MANAGEMENT AND INSPECTION ............................................... 179  
Organizational Form of Educational Management .......................................................... 201  
13. Miscellaneous ............................................................................................................ 203  
  (a) Pre-primary Education ............................................................................................... 203  
  (b) Private Schools ......................................................................................................... 209  
  (c) Curriculum, Textbook and Evaluation ..................................................................... 214  
  (d) libraries .................................................................................................................... 226  
  (e) Extra-curricular Activities ......................................................................................... 231
PREFACE

His Majesty's Government constituted the National Education Commission on February 25, 1990 in the interim period after the reinstatement of democracy. It was charged with eradicating the weaknesses and shortcomings of the past, laying down the goals of national education, and formulating policies to achieve them in a manner consistent with the human rights enshrined in the Constitution of the Kingdom of Nepal, 1990, and the democratic values and norms as well as social justice. Its other responsibilities were to give concrete form to the concept of the equal educational opportunity, to fulfill the national aspirations in the field of education, and to make it correspond with the international context. It was required to complete its assignment by May 14, 1991. However, it could not make any substantial headway, because the amount of time allotted to it was too limited.

Later, the Commission was reconstituted with 16 members. It stayed in office till May 18, 1992 to work out its Report on the educational system for a new democratic Nepal.

TERMS OF REFERENCE

His Majesty's Government laid down the following terms of reference for the National Education Commission:

1) To re-define the goals of education, to provide equal educational opportunities, to upgrade educational standards, and to draw up a plan for educational manpower;

2) To review all levels of education from the pre-primary to higher education, and to realign them:

3) To suggest new educational dimensions and structures, such as multiversity (including general, technical, and open universities), Nepalese Institute of Technology, Polytechnic Institute, Polytechnic School, Technical School, Non-formal Education (including Adult Education, Female Education, National Literacy Campaign, And Special Education), and schools of international standards.
4) To make an impact study of different educational projects, and to work out policies for them;

5) To review the organizational, educational and administrative management of the educational institutions operating under public grants and popular participation;

6) To recommend policies on the grants provided to all levels of educational institutions;

7) To formulate appropriate policies on the supervision, evaluation and follow-up of the administrative and managerial aspects of different educational sectors, and educational and academic activities:

8) To recommend ways of raising the educational standards, keeping in view the standards prevailing in other member-countries of the SAARC:

9) To examine the standard, relevance and usefulness of the curricula, and to evolve text-books to suit them;

10) To bring out reference and other educational materials;

11) To consider the structural forms and operational styles of the National Education Committee, Ministry of Education and Culture, and different educational units from the pre-primary to higher education levels, and to suggest ways of maintaining harmony and coordination among them;

12) To recommend appropriate steps in connection with Sanskrit education;

13) To reform the examination system and the manner of conducting examinations;

14) To review the terms of employment, career development, training and other facilities of the teachers;

15) To review the problems connected with the present management and cost structure of higher education, and to devise a clear-cut policy in this area;
16) To suggest ways to raise the level of popular participation in the education sector; and

17) To make other recommendations that the Commission may deem fit.

Adoption of the Rules of Procedure: In the course of laying down its rules of procedure, the Commission held a three-day intensive workshop, in the first place. One fundamental fact emerged from the discussion was that in the changed context the Lillie allocated to the Commission was not adequate for the in-depth study of the different facets of national education. It was further decided that it should turn its undivided attention to undertaking a study of the actual situation prevailing in various aspects of education, and to identifying and solving the problems as they exist.

Formation of Task Forces: The Commission took a decision to form a number of task forces, keeping its terms of reference in view, to study and report on the following topics.

1) The objectives, policies, manpower, and organizational and fiscal management of education:

2) Higher education (general);

3) Higher education (technical);

4) Teacher training;

5) Secondary and higher secondary education;

6) Sanskrit education;

7) Pre-primary and primary education;

8) Technical and vocational education; and

9) Non-formal education Distance Education and special education.

Besides, the Commission had the privilege of receiving special assistance from some other individuals in the study of some basic issues. The names of the task force members are listed in Appendix A. In their turn, the task forces invited and
consulted with persons eminent in their fields of competence in the course of preparing and finalizing their reports.


**Organization of Regional Seminars**: The Commission conducted seminars in different regions of the country, with summaries of the task force reports as working papers. Their purpose was to collect suggestions for framing policies on regional extension and qualitative improvement of education, keeping the wishes of the people in view. The venues and dates for such seminars were selected, bearing in mind that they should represent the intellectuals, teachers, politicians, and social workers of all the districts of the Kingdom, and that they should be convenient to most of them.

<table>
<thead>
<tr>
<th>Venue</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hetauda</td>
<td>1/28/1992-30/1/1993</td>
</tr>
<tr>
<td>Pokhara and Bhairahawa</td>
<td>7/2/1993-9/2/1993</td>
</tr>
</tbody>
</table>

These seminars were held under the auspices of the members of the National Education Commission, and the valuable suggestions emerging from them were duly incorporated in the Commission's Report.

The Commission has received help and cooperation from many sources in its work. Numerous scholars and lovers of education visited the Commission's office in person to present their views, and many more sent in their suggestions by post. Valuable ideas were received from a number of organized bodies. Since the
formation of the Commission, the mass media, both printed and electrode, provided a forum for drawing attention to the need for taking corrective measures in the field of education. Articles were disseminated and views aired continually, providing a rich mine of information for the Commission.

**Study Tours:** In view of the fact that science and technology is constantly on the march, and that lots of development and innovations are taking place in other countries, the Commission members went on a study tour of India, Bangladesh, Thailand, Indonesia, Malaysia, and Korea. The experience and knowledge, gathered in the course of these trips, have proved of immense value. Likewise, the suggestions put forward by the senior professors of the country, who visited some parts of East and West Nepal in connection with the feasibility study of the 'multiversity', provided the much-needed base for the preparation of this Report.

The amount of time at the disposal of the Commission was not sufficient for going over the entire gamut of national education, and for shaping the full range of recommendations to correspond with the historic context of the restoration of democracy. Under the circumstances, the best that it could do was to concentrate on the basic aspects, and to include in its Report recommendations on the ways to deal with the observed problems. In this connection, it has given an account of the present situation along with the background of each problem. It deals mostly with the policy measures that should be taken in different areas. Owing to the time factor, it has not been possible to include in its Report, programmes and work-plans. Nevertheless, the Commission is of the view that, once these recommendations are accepted, His Majesty's Government would be well-advised to form task forces for taking up the next phase of operation, namely, the formulation of programmes and work-plans on a priority basis.

Appreciably revitalized after its reorganization on August 22, 1991, the Commission met 50 times during its span of slightly more than 9 months. Apart from these plenary sessions, the meetings of the Steering Committee, and subject-wise seminars and discussions were conducted on a regular basis.

Organization of the National Education Seminar: A 3-day National Seminar was held from May 5, 1992 to May 7, 1992 to discuss and exchange views on the Draft Report produced by the Commission. Among its participants were Parliamentarians,
educationists, scientists, journalists and education administrators. After holding general discussion on the fundamental questions of national education, they broke into different groups to exchange views on specific issues and to formulate suggestions for inclusion in the final Report. Those suggestions have been incorporated in the Report in their proper order.

Acknowledgements: International donor agencies have supported various programmes of the National Education Commission. The assistance extended by the UNDP deserves special mention. Other cooperating agencies are: UNICEF, GTZ, SDC, DANIDA and LEES. The Commission acknowledges the sincere gratitude it owes to all of them for their cordial helps.

The Commission has also received the consultancy services of three senior UNESCO experts with the cooperation of the UNDP. They were Dr. T.N. Dhar, Dr. Grant Harman and Mr. John Beynon, who advised the Commission on the shape of the education plan to come, after studying the present academic situation of Nepal. Their studies and observations have been of incalculable value in hammering out the prospective outline of education in Nepal.
The composition of the National Education Commission, when first formed during the interim period, was as follows:

1. Dr. Keshar Jang Rayamajhl  
   Chairman  
   Minister of Education and Culture,  

2. Dr. Trailokya Nath Upraity,  
   Vice-Chairman  
   Educationist,  

3. Dr. Lekh Nath Belbase Member,  
   Member  
   National Planning Commission,  

4. Mr. Basu Dev Chandra Malla.  
   Member  
   Vice-chancellor, Tribhuvan University  

5. Mr. Shrikrishna Acharya,  
   Member  
   Vice-Chancellor, Mahendra Sanskrit University  

6. Dr. Ishwar Prasad Upadhyaya,  
   Member  
   Secretary, Ministry of Education & Culture  

7. Dr. Suresh Raj Sharma,  
   Member  
   Educationist  

8. Mr. Lakshaman Rajbansi,  
   Member  
   Educationist  

9. Dr. Lila Devi K.C.,  
   Member  
   Educationist  

10. Dr. Puma Kant Adhikari  
    Member  
    Educationist  

11. Mrs. Suprabha Ghimire, President,  
    Member  
    Nepal University Teachers' Association  

12. Mr. Sushil Chandra Amatya  
    Member Secretary  
    President- Nepal National Teachers’ Organization  

12
This Commission was in existence till May 13, 1990. During its period of incumbency, it identified the problem area, delineated its scope and drew up its rules of procedures. The present Commission attaches great value to the contributions made by Dr. Rayamajhi and other members together with the member-secretary, Mr. Chhabi Lal Gajarel. On July 29, 1991 when this Commission was reorganized, it was headed by Mr. Rama Hari Joshi, who was then the Minister of Education. The Commission wishes to place on record its sincere gratitude to him for his inspiring contributions. It also acknowledges the debt of gratitude it owes to Mr. Hasta Bahadur Malta, the Assistant Minister of Education and Culture, and Social Welfare, whose deep interest in the work of the Commission, and whose advice and suggestions, have been one of its sources of inspiration.

Grateful thanks are due to Radio Nepal, Nepal Television, and journals of different periodicity, whose views and comments have helped speed up its work.

The Commission would also like to express thanks to all those scholars and intellectuals, political leaders and workers, and experts and specialists, who extended their hands of cooperation in carrying out its mission at different stages of its work.

It would also like to offer thanks to Dr. Chuda Mani Bandhu, Dr. Kedar Nath Shrestha, Dr. Hemanga Raj Adhikari, Mr. Gopi Krishna Sharma, and Mr. Upendra Dev Acharya, who improved and edited the text in the process of finalization; Mr. Purna Govinda Shrestha, who typed out the Report; and Mrs. Sanu Malya Manandhar, who produced the computer print-out. Thanks are also due to the entire staff of National Education Committee, who provided the administrative and managerial back-up, together with all those celebrities, without whose support the national and regional seminars would not have been such a resounding success.

Finally, it may be observed that education is not a static thing, nor is it like a monument which, once erected, stays forever. It is always in a state of flux. Every change in the social milieu cries out for a corresponding change in the system of education. However, the Commission is convinced that the recommendations contained in this Report, which are intended to provide the groundwork for a national education plan in the changed context of Nepal, will add a new dimension
to the country's educational future.
### OFFICIALS OF THE NATIONAL EDUCATION COMMISSION

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mr. Hem Raj Poudyal</td>
<td>Under-Secretary</td>
</tr>
<tr>
<td>2</td>
<td>Mr. Laxman Udas</td>
<td>Under-Secretary</td>
</tr>
<tr>
<td>3</td>
<td>Mr. Copal Prasad Adhikari</td>
<td>Section Officer</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Mahesh Nath Parajuli</td>
<td>Section Officer</td>
</tr>
<tr>
<td>5</td>
<td>Mr. Shakti Prasad Shrestha</td>
<td>Accounts Officer</td>
</tr>
<tr>
<td>6</td>
<td>Mr. Shreekant Poudyal</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>7</td>
<td>Mr. Jaya Krishna Aryal</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>8</td>
<td>Miss Kamala Singh</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>9</td>
<td>Mrs. Sarbagyan Luxmi Mulmi</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>10</td>
<td>Mrs. Kanak Devi Bajrachary</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>11</td>
<td>Mr. Bijendra Man Bajracharya</td>
<td>Primary School Inspector</td>
</tr>
<tr>
<td>12</td>
<td>Mrs. Ganga Devi Manandhar</td>
<td>Typist</td>
</tr>
<tr>
<td>13</td>
<td>Mr. Puma Gobinda Shrestha</td>
<td>Typist</td>
</tr>
<tr>
<td>14</td>
<td>Mr. Luxmi Bahadur Karanjit</td>
<td>Accountant</td>
</tr>
<tr>
<td>15</td>
<td>Mr. Murari Sharma</td>
<td>Accountant</td>
</tr>
<tr>
<td>16</td>
<td>Mr. Uddav Thapa</td>
<td>Assistant Accountant</td>
</tr>
<tr>
<td>17</td>
<td>Mrs. Sanumaiya Manandhar</td>
<td>Typist</td>
</tr>
<tr>
<td>18</td>
<td>Mr. Rishi Dangol</td>
<td>Assistant</td>
</tr>
<tr>
<td>19</td>
<td>Mr. Ram Bahadur Maharjan</td>
<td>Driver</td>
</tr>
<tr>
<td>20</td>
<td>Mr. Surya Bahadur Lama</td>
<td>Driver</td>
</tr>
<tr>
<td>21</td>
<td>Mr. Chandra Bahadur Lama</td>
<td>Driver</td>
</tr>
<tr>
<td>22</td>
<td>Mr. Purushottam Khanal</td>
<td>Peon</td>
</tr>
<tr>
<td>23</td>
<td>Mr. Bir Bahadur Rana Magar</td>
<td>Peon</td>
</tr>
<tr>
<td>24</td>
<td>Mr. Shim Lal Maharjan</td>
<td>Peon</td>
</tr>
</tbody>
</table>
1. NATIONAL GOAL, STRUCTURE AND POLICY OF EDUCATION

1. Background:

Education, the supreme necessity of human life, has been subjected to review and reappraisal at every stage of history. The choice of matter and medium has undergone changes, goals and policies reconsidered systems and processes altered from time to time. In Nepal the modern educational system was ushered in during the Rana regime to replace the traditional pattern, which had been in existence long since. First, feeble attempts at planned approach in this field appear to have been made around 1947. However, no sustained endeavor was launched with any seriousness until the establishment of democracy in 1951.

A significant breakthrough was made in 1953 with the formation of an Education Committee, which laid stress on the need of working out a national plan for introducing timely and suitable changes in this area. Acting upon this suggestion, His Majesty's Government constituted the National Education Planning Commission in 1955.

A year after the political change of 1960 a Comprehensive Education Committee was formed. That was followed in 1962 by the visit of a team under the leadership of Dr. Hugh B. Wood at the request of His Majesty's Government, and in cooperation with the UNESCO. The team drew up a report on the basis of its findings. After the long gap of almost a decade, a significant move was made in 1971; when the National -Education System Plan was enforced throughout the country. Its stated objective was to bring about revolutionary changes in the educational sector, particularly in the production of trained manpower, but its real purpose was to intensify popular faith in the Panchayat system.

Then came the students movement of 1979, which had the effect of putting the Panchayat system itself on trial. Afterwards, a number of the basic features of the National Education System Plan were reviewed by the Royal, Higher Education Commission, appointed in 1981. In the course of implementing its report, which came out in 1982, the Mahendra Sanskrit University was established, the various Institutes were glorified with the name of Faculties, and some other minor cosmetic changes were effected.

During this period the tendency to centralize the administration of the Tribhuban University became more and more pronounced, and the academic atmosphere became more and more polluted. The mounting 'Panchayatization' of education fueled the under-current of revolt in the academic community. As a result, students from the primary schools to institutes of higher education took to the streets during the historic people's movement of 1989/90, rubbing shoulders with other compatriots, and quite a few of them laid down their lives in the course of the struggle.

After the reinstatement of democracy in the country, it has been realized on all hands that education has a key role to play in bringing about social changes, and in the reconstruction of the nation as a whole. It has also been felt that, for this purpose, national education should be given a new dimension without any undue waste of
time. The weaknesses inherent in the National Education System Plan have already made it counter-productive. Conceived and enforced to prop up the erstwhile Panchayat system, it has no justification for prolonging its life.

Moreover, the human rights, guaranteed by the Constitution of the Kingdom of Nepal, 1990, and democratic values and norms, demand that the fundamental goals of education be changed. The people’s aspirations, national commitment, international situation, and contemporary trends affirm in one voice that the national education system should be reformed to make room for innovations.

2. Present Situation:

Although the National Education System Plan of 1971 has, off and on, been tampered with, the educational structure of Nepal continues to follow the broad outlines drawn by it. As has been stated above, the experience gained during the period of its implementation (1971-1975) has gone a long way to prove that it is a very harsh system. Owing to some of its ill-conceived and impractical goals, some of its basic policies had to be altered during its implementation period itself. For example,

a) Primary education, which was to cover 3 years and whose aim was just simple literacy, was adjudged impractical, and its duration was changed to 5 years;

b) Vocational secondary schools, set up with the aim of producing low-level technical manpower with 400 hundred marks, were changed into ordinary secondary schools with 100 marks, and the policy of producing low-level manpower was abandoned wholesale;

c) The system of entrance examination, which is an appropriate mechanism for gaining access to the next higher level of education, was scrapped as impractical, after toying with it for one or two years and, unable to resist the mounting political pressure, it had to open wide the doors of higher education to all those who had passed the SLC examination:

d) No attempt was made to enforce the policy of admitting 50 per cent of the students at any given time to technical institutes, and about 80 percent of the students were admitted to general education;

e) Even before the expiry of the three years of the implementation of the revised University project, which was based on the conception that the University was nothing but a conglomeration of Institutes, its decentralized administration was abandoned in favor of a heavily centralized administration. In this way, the National Education System Plan, whose stated aims and policies are couched in high-flown, idealistic terms, has revealed, as the years rolled by, that its sinister motive has been to frustrate, rather than facilitate, the wider interest of the people.

Professing the policy of de-centralization in the field of educational management, the National Education System Plan envisaged a Ministry of Education whose functions would be limited to policy initiation, evaluation and follow-up, with the Regional Offices getting busy with the execution of programmes. With the same end in view
the District Offices have also been toned up. However, during the past two decades it has become increasingly apparent that the education administration has completely forgotten or failed to understand the fundamental principles and policies of management. For example,

(1) the present Ministry of Education and Culture lies overburdened with the task of implementing programmes rather than formulating policies;

(2) The Regional Education Directorates (now Regional Education Inspectorates) have become mere appendages to carry out the orders emanating from the Centre, because the powers delegated to them are severely restricted, and they have no programmes to carry through;

(3) Tribhuban University, which should function as a responsible autonomous body, has become, in reality, a heavily centralized agency, groping in the dark, with no clear-cut policy to guide its feet. Convinced of the paramount virtue of an efficient inspection system, the number of inspectors was fixed in 1971 for each district of the country, depending on the number of schools in each district. But, strangely enough, although the number of schools has tripled, on average, between 1971 and 1990, the number and proportion of inspectors has remained constant. No facilities have been provided for inspection tours, with the result that the inspection itself has quietly gone into hibernation.

No survey of the educational scene of Nepal fails to dwell on the rapid expansion of educational facilities over the past four decades. In fact, viewed purely from the quantitative angle, there is no ground for doubting that the achievement of Nepal in this sector has been quite satisfactory. In a country where, till 1951, there existed 321 primary schools, 11 secondary schools, and 1 college (Tri-Chandra College), there are now 17,842 primary schools, 2,964 lower secondary schools, 1,953 secondary schools, and 123 campuses affiliated to 2 universities. Talking of the expansion of education alone, Nepal certainly has not lagged behind any of the neighboring countries. But what is ironical is that our situation allows us no ground for satisfaction other than the number.

A review of the other components of the education system reveals that our national education system is teetering on the brink. Of course the nation has pumped a good deal of money in education, but the dividend it is receiving is a mere pittance. As a result, the nation is finding it difficult to sustain a system which is pockmarked with all kinds of discrepancies and distortions. Simple statistics reveal the amazing fact that 107 per cent of the children of primary-school is enrolled. But, on closer scrutiny, only 79.6 per cent appears to have been actually enrolled. Likewise, if we are to talk of statistics alone only 64 per cent of the children goes to classes 1 and 2. The number of students who fail to make grade is much higher, and some students take 12 years to complete a course which requires just 5 years on average. Classes, which should run for 180 days, remain open for not even 100 days. The overall knowledge of a student of class 5 is that of class 3. And the most ridiculous thing is that His Majesty's Government spends Rs.1,400,000,000 on primary education which has no definite targets.

In the urban areas parents, dissatisfied with the management of the schools, receiving government grants, are turning to private schools for succor. Now even the
villages are witnessing an explosion of English-medium private schools. The guardians get their children admitted to such schools at great cost, yet they are not getting what they look for, that is, good education. Although some of these institutions have achieved high academic excellence, most of them have to put up with many handicaps: over-crowded class-rooms, proliferation of text-books, less qualified and untrained teachers, etc.

Thus, there exist two distinct and separate groups of schools in the country: schools, operating under government subventions, which cater for the weaker sections of the society; and private schools, which are the exclusive preserve of the wealthy to whom cost is no consideration. People who can ill-afford the cost are seen to patronize such institutions by cutting other expenses to the bone.

Tribhuban University, which has to bear the brunt of higher education, is spiked with problems. The numbers of campuses, operated by it, not being sufficient to meet the demand, private campuses are sprouting all over the country. Although the pressure of enrolment has been increasing year by year, the problem remains as it is, because there is lack of concrete policy and programme. After crossing the hurdle of admission, the students find themselves up against other equally frustrating problems like irregular classes, postponement of examinations, delay in the publication of results, causing the loss of the precious time of the student community.

No effort has been made to introduce timely changes in the curricula. The production of text-books is proceeding at a snail's pace. The shortage of amenities like class-rooms, dormitories, libraries and laboratories has not been conducive to creating proper academic atmosphere in the campuses. Higher education has become so problematic that the Tribhuban University can hardly cope with it. In the absence of definite policies, plans and programmes, a situation has arisen where the teachers and administrators have no work to turn their hands to and where the students have no suitable programmes to keep themselves busy.

Due to centralization, the campus chiefs of the remote areas, be it Ilam or Bhadrapur in the east, or Doti or Mahendranagar in the west; have to rush to Kathmandu for academic guideline advice and financial assistance, resulting in the misuse or waste of time, energy and resources.

The now defunct Panchayat system, which put a blanket ban on all kinds of political activities, had the indirect effect of politicizing the educational sector. Their roots have sunk so deep that even now it has not been possible to keep this area wholly free from politics. In the wake of the rehabilitation of democracy, nonacademic decisions like automatic assimilation into permanent cadres and automatic promotion of the University teachers and administrators were taken, without heeding the far-reaching consequences that they might lead to. On this showing, it is quite obvious that in the days to come the agencies concerned will have to move heaven and earth to keep the educational institutions away from politics, and to develop them as centres of scholastic activities under a suitable academic environment.

The problems of higher education, whether general or technical, have been precipitated by several factors working together. They are: shortage of research centres, absence of proper programmes in the Central Department, lack of variety in educational activities, inflation of the administrative cost, and absence of educational
policies, rules and plans attuned to the changed political context.

The extension and expansion of higher technical education has gone ahead at a very slow pace. It shares the problem in common with the Tribhuvan University. Although it has long since been felt that there is a clear case for extending the scope of technical education in view of the steady growth of demand, no effort has been made to bell the cat.

The Mahendra Sanskrit University has been established for the propagation of Sanskrit education, with 7 Centres of Learning, located in different parts of the country. Compared with the amount invested in this sector, the number of enrolment is quite low. To compound the problem, some of them drift away to general education at some stage after studying the modern subjects, because the prospect for employment is rather limited. The teachers suffer from lack of motivation and encouragement for academic development.

If, on the one hand, the supply of high-level technical education falls far short of demand, skilled and semi-skilled manpower required for national construction, is in short supply, on the other. The National Education System Plan, which aims at producing all categories of manpower, has failed to evolve and execute a programme, designed to meet the target. In consequence there is a huge dearth of technical and skilled manpower of a general nature.

Non-formal education has a big role to play in a country like Nepal, where literacy rate is miserably low. Yet, the amount spent on it is as low as 0.3 per cent of the total education budget. Of this foreign aid component stands at 42.3 per cent. Not surprisingly, the progress achieved is far from satisfactory. The situation is further exacerbated by instable and random approach towards the implementation of policies and programmes, shortage of curricula and educational materials, absence of structural arrangement, and lack of evaluation and follow-up.

The special education, targeted to the physically handicapped, is in no better shape. It is looked upon more as an act of charity than as a form of education to which the citizens of the country are entitled. Given this altitude, there is no wonder, if it occupies a position at the bottom of the priority scale.

A look at the present state of national education and the fundamental problems besetting it clearly reveals that it should be reformed as soon as possible. However, due consideration must be given to the popular movement of 1989/90, the subsequent reinstatement of democracy; the spirit of the Constitution of the Kingdom of Nepal 1990, the national aspirations and commitment of Nepal, and the contemporary climate and likely trends of the international world to determine what form it should take, which direction it should follow, and what dimension it should assume. Before setting out the national goals of education, it would not be out of place to examine in some details the above factors.

Conformity with Political Culture: In the history of Nepal the massive people's movement of 1989/90 occupies a place of pre-eminence. The restoration of democracy, a direct outcome of that epoch-making event, has given rise to the feeling that the education system of the country should be reformed to bring it in line with the democratic culture, that its main thrust should be to favor the growth of
individual genius, individual specialty, and development of personality in the highest tradition of democracy, and that it should do away with control-based traditional system once and for all. A system of education that lays stress on the dogmas of abstract ethical principles and automaton-like discipline, and that seeks to lead the individual along the chosen path in blind imitation, allowing no scope for the free play of individual Judgment and discretion, is totally repugnant to the spirit of democracy. The preferred system is one which touches off self-knowledge and self-motivation and which creates an atmosphere where the abilities inherent in him can find spontaneous expression.

To meet the above requirements the choice of an appropriate teaching methodology is equally important. For example, the long-standing, pragmatist technique, which emphasizes controlled drills, has no place under a democratic set-up. What conforms with the democratic culture is revelatory approach which helps develop the latent genius of an individual. Education today should be student-centered, not teacher-centered, and a pupil gets a chance to assert and affirm his genius under democratic conditions, not under the galling restraints of regimentation.

The purpose of the Constitutional rights and directive principles and policies is to ensure that, while imparting a new dimension to national education the fundamental rights, human rights, and the directive principles and policies guaranteed by the Constitution of the Kingdom of Nepal, 1990, should take precedence over all other considerations.

Article 18.1 in Part 3 of the Constitution dealing with the cultural and educational rights, clearly lays down that every community living in Nepal, has the inalienable right to safeguard and enhance its language, script and culture. Sub-article 2 of the same Article states that every community has the right to open schools with a view to educating their children in their mother Longue. Mention is made of the right to education under the directive principles and policies of State, forming Part 4 of the Constitution. Article 26.2 of this Part affirms that the State will follow a policy of maintaining national unity in the midst of the cultural diversity of the country by allowing everybody to develop his language, literature, script, art and culture in healthy and happy harmony with all other religions, ethnic groups, communities and languages.

Sub-articles 7.8.9 and 10 of Article 26 lay down that the State should observe the policy of providing proper education to womenfolk, children, orphans and the disabled and the old in order to enable them to become partners of national development. They should also be provided with the opportunity of earning their own living. Their rights and interests should be safeguarded and promoted. And Sub-article 11 of Article 26 states that primacy should be accorded to the advancement of science and technology and that attention should be focused on the evolution of local technology.

**National Aspiration and Commitment:** The restoration of democracy has given rise to a unique opportunity for making sweeping changes in all aspects of the national life, including education. Aware of this opportunity and conscious of its responsibility for making changes in the field of education in tune with the aspirations of the people, the elected government has made a number of commitments.
1) Nepal is a signatory to the declarations of the World Conference on Education for All held in Bangkok, and the World Summit Meeting on Children held in New York in 1990. It has also drawn up the work-plan at the national level for the 1990s. The plan aims to raise the school-going population from the present 64 percent to 100 per cent, to increase the existing 31 per cent of girls enrolment to 100 per cent, and to step up the primary education completing percentage from the present 27 to 70 within the next 10 years. To achieve these targets His Majesty's Government has already drawn up policies, plans and programmes. What is needed now is to tie them up with other levels of education in order to give them a fair chance of success.

2) According to the Constitution, primary education may be imparted in one's own mother tongue pointing to the clear need of formulating clear plans and policies for the provision of primary education to the various linguistics groups, who are scattered all over the country.

3) The Higher Secondary Education Act 1989, has been placed on the statute book, but no higher secondary classes (10+2) has been started. The Tribhuban University has been admitting to the Proficiency Level those students who have got through the SLC examinations. Nevertheless, it has been felt that, in view of the increasing number of students, their intellectual grades, and other practical difficulties, the plans and policies relating to higher secondary education should be given a definite direction.

4) Committed to expanding the scope of education with the help of phase-wise provision of free secondary education, the government has announced that from this year, on the sixth class will be free. In this connection, clear policies plans and programmes have to be worked out and implemented phases wise.

5) Triggered by the parental desire to impart quality education to their offsprings, the number of primary and secondary schools has been multiplying at a fast rate. If the qualitative gap between these schools and public schools is not bridged, there is a distinct possibility that educational inequality in the society will grow apace. This situation calls for remedial measures to check the tendency to drop out from public primary schools, on the one hand, and to make adequate provisions for keeping the private schools within the reach of the society, on the other.

6) The national target for the current decade is to lay emphasis on female literacy and to bring down illiteracy rate from 65 per cent to 32 per cent. To achieve this target, extensive preparations will have to be made to frame and implement clear-cut policies and programmes as soon as possible.

7) The production of skilled and semi-skilled manpower is not an end in itself. Those who have them should be encouraged to set up private business and be self-reliant. However, their economic condition and morale will not go up until the dignity of labor is enhanced. For this purpose, policies, plans and programmes relating to all kinds of technical and vocational training should be evolved and put into effect without delay.

8) Teachers are the backbones of any educational system. For this reason, no effort
should be spared to raise the quality of their performance and to make them fully aware of their responsibilities. Adequate provisions should, therefore, be made for training them in a proper way. In other words, if training is to be made compulsory for all teachers, appropriate plans and programmes should be devised and implemented each year to train not only the teachers of the primary, secondary and higher secondary schools, but also the trainers of technical and vocational training centres.

9) In Nepal today the Tribhuban University alone can no longer be expected to look after all the affiliated and private campuses. It has become practically impossible. In fact, there have been talks in the official and political circles, hinting at the necessity of having more than one university to take proper care of higher education. The present situation requires that serious thoughts should be given to what the number, form, composition and programme of the universities should be and what policies should govern them.

10) The concept of 'multiversity' presupposes the existence of a body like the University Grants Commission to coordinate and assess the programmes of the universities, to offer advice, and to provide financial subventions.

11) There has always been a need for special education to enlighten the physically and mentally handicapped and to integrate them into the social fabric. This challenge and responsibility are being felt with a greater sense of urgency in the present context of the country.
International Context: Science and technology have conquered the distance, bringing the world closer together. Under the circumstances, the people of Nepal can no longer live in isolation. They have to project themselves on the world stage. To this end, the education system of Nepal should be equivalent to, or be compatible with, the international standards, especially the qualitative norms of the SAARC countries. Viewed from the angle of the ever-increasing international linkages, failure to work out coordination with the educational environment of the world, more especially with the neighboring countries, would mean a disastrous shrinkage of educational opportunities.

Among the Nepalese there has been a growing tendency to go to foreign educational institutions, and if the present trend is any guide, such tendencies are likely to increase, not decrease, in the days that lie ahead. In the present context where educational and cultural contacts are steadily increasing, particularly with the countries of South Asia, the question of maintaining a high level academic standard assumes critical importance, for it depends on the decision to grant or withhold recognition. If the observed inclination of the Nepali students to go abroad for higher studies is kept in view, the task of providing appropriate opportunities for higher education at home falls well within the purview of the educational policy.

Foresight: The educational system of today has a bearing on tomorrow, because the students of today will be called upon to play their roles in the society of tomorrow. No education system fails to cast its influence on the future society. If the past system is affecting us at present, what we evolve today cannot but have its impact on the future. For this reason, foresight is an important element in deciding on the educational system. If no thought is given to this factor, and if plans and programmes are hammered out in a hurry with the participation of a handful of people, as it was done in the past, the necessity to alter or amend them, or to dump them on the garbage heap even before the implementation is over, will be forced on us. This conclusion has been convincingly borne out by the review of the National Education System Plan of 1971/76.

We should be on our guard to prevent the recurrence of such follies in future, and we should approach the question of national education with caution and foresight. A successful, timely and socially beneficial plan can be worked out, if its financial, administrative and managerial implications are kept constantly under review at the implementation stage.

More particularly, profound vision is closely linked with the national goals of education. They shape the destiny of the individual, society and nation. However, our future is not a pre-fabricated structure. It has to be created and constructed; and it is shaped and brought into being by an appropriate education system. If the education bestowed on a man of today, who stands at the threshold of the 21st century is out of joint with the future, he will be left behind forever: the society in which he was born will lag behind other societies for want of modernization. The nation itself will have to pay for the shortsighted approach. Development will become an uphill task. There will be no release from the bondage of backwardness. The individual, the society, and the nation can, and must, be saved from the disastrous aftermaths of an education system which lacks vision.
Being a developing country, the biggest challenge facing Nepal today is how to lead the nation along the right path of progress. Population explosion, environmental damage, rising unemployment, declining moral values are some of the negative factors, impinging on the society. The individual, the society and the nation have no chance of moving up and above, until such trends are eradicated or reversed with the help of a sound education system, taking advantage of the ever-increasing store of knowledge, free flow of information, and transfer of technology. Another area where education can play a decisive role is internal and external relations, based on mutual support, goodwill and understanding. It can also help remove the regional and communal imbalances, and assimilate the weaker sections of the society into the national main stream. The goals and policies of national education should be fashioned with visions of such a glorious future.

3. Goals of National Education: In the light of what has been stated above, the Commission is of the view that the goals of national education should be fixed as follows:

1) **Development of Inherent Genius and Personality:** Man is born into this world with infinite possibilities. He learns his first lesson at home. The prime goal of education is to bring out the genius and the possibilities of development inherent in him. To achieve the objectives enumerated under the directive principles of the State in the Nepalese Constitution, he should be made competent to live up to them by providing him with required knowledge and skill. It should be remembered, however, that the aim of education is not to implant in him such knowledge and skill from outside. It is achieved through the growth of human qualities, lying within. Education should be pupil-centered, and opportunities should be provided for the identification of the genius with the provision of proper curricula and educational programmes. National education should try at every stage to detect genius, to encourage the diligent and the intelligent, and to make available to them facilities for creation, research and invention with the aim of promoting national genius in the fields of art, literature and science. The establishment of personality should be accepted as a solemn responsibility, because the nation makes its name through the men of genius.

2) **Enhancement of Supreme Human Values, National and Social Norms and Beliefs:** Education should inculcate in every individual the supreme human values along with national and social norms and mores to help promote a healthy social evolution. At every stage of history education is seen to have fostered the values, acceptable to the society. Changes occurring in the society may bring about reciprocal changes in social values. However, the overriding human values remain the same at all places and in all times.

Education should teach the lesson of self-reliance. It should extol the dignity of labor. It should inculcate the spirit of good will and tolerance. It should help produce men of character. It has a special role to play in strengthening social and cultural integrity and mutual harmony, in developing human qualities, and in upholding moral values. From the lower to the upper levels moral education should be imparted in an integrated form for the promotion of an egalitarian welfare State based on open society, for the eradication of exploitation, for the establishment of a healthy social life based on just and moral principles, for the preservation and promotion of human rights, end for the safeguarding of public
interests, as indicated by the directive principles and policies of the Constitution.

3) **Socialization and Consolidation of Social Unity:** Education should socialize the individual and strengthen social integrity. Characteristically, Nepal is a multi-ethnic and multi-lingual nation. In this context, integrity should be understood to mean unity in the midst of diversity. As stated in the directive principles and policies of the Constitution, education should help strengthen national integrity by maintaining cultural variety. For this purpose, a healthy and harmonious social relationship should be developed among different castes and creeds, and ethnic and linguistic groups by providing each of them with an equal opportunity to develop their language, script, and art and culture.

In a multi-ethnic society education has a key role to play in giving practical shape to the policy of consolidating national solidarity on the basis of cultural diversity and through the development of the language, script, and art and culture of each community. In a multi-ethnic and multi-linguistic society all ethnic cultures should be preserved and fostered for the sake of the ethnic identity of each. It would, therefore, be desirable to include ethnic languages, scripts, and arts and cultures as subjects for study. This is a task which should be taken up at different levels of education. Requisite preparations should be made to produce text-books and education materials in the process of including ethnic-language literature in the course of study.

The solid basis for strengthening national unity in a multi-linguistic society is the development of understanding. For this purpose, the separate roles of the national language and ethnic languages in the national communication process and at the ethnic and community level respectively should be accepted without any reservation. As the mother tongue is the best medium for imparting knowledge and skill at the primary level, its use should be encouraged in a democratic spirit.

Nepali is not only the national language. It is also used for State business. Its value as the lingua franca can be hardly overstated. It makes a special contribution to the fostering of national solidarity and emotional integrity. For the sake of promoting national unity arrangement should be made to impart skill in the use of national language from an early age, particularly to those whose mother tongue is not Nepali. By the end of the primary education the level of their skill should be such as to enable them to receive secondary education in the Nepali language. It may also be noted that the use of Nepali language has been increasing as the medium of instruction for higher education, as it has been found that it is a good tool for specialized knowledge and for the transfer of technology. This trend, which has helped expand the area of education and raise its quality, should be stepped up with greater dynamism.

4) **Harmonious Existence:** In the national and international context of today, education should inculcate the value of harmonious existence in a manner consistent with the spirit of this day and age, without sacrificing national identity. Unity amid diversity is also an integral part, not to say the hallmark, of our national identity. Education should help coordinate the individual personality with the contemporary national and international milieus. The leading characteristic of an educated person is his ability to live in harmony with the
society of the day. For this purpose, he will be required to acquire a requisite
degree of efficiency in the use of the English language, which has a wide
currency as an international language.

Proficiency in the English language, which is necessary for the expansion of
science and technology and the flow of information, keeps the door of higher
education open. Besides, steps should also be taken to teach other international
languages to the required extent, including the languages of the neighboring
countries, for the promotion of international intercourse and understanding. With
that same end in view, study of, and research into, the great religions, languages
and cultures of the world should be encouraged along with the masterpieces
of the world literature, and different aspects of human behavior and creative
faculties.

5) **Modernization of the Society and Development of Human Resources:**
Education should help modernize the society. Modernization implies a change of
outlook and behavior which an individual resorts to in the process of attuning
himself to modern trends. It is a form of social and cultural transformation. In
itself, education is a catalyst, bringing about changes in the experience,
knowledge and thinking of the individual. Change of outlook precedes the
change in the behavioral pattern.

For the modernization of the society the country needs the education of science
and technology. As stated in Article 26 of the Constitution, education should
play an outstanding role in the development of science and technology. As a
result of the advancement of scientific knowledge, people will acquire positive
and just thinking and behavior towards society and its environment, and the use
of advanced technology will bring about changes in their life-style. Their
combined effect will be to reveal the form of modernization that the society has
opted for.

The advancement of science and technology is the foundation of social
modernization. Hence, the country has to make proper provisions for the
propagation of science and technology, if it is to keep pace with the fast-moving
modernization process, sweeping over the human society.

Owing to rapid advances in the field of science and technology, the traditional
technologies will have to be transformed and modernized in accordance with the
spirit of the age. Our own resources can be put to good use for the manufacture
of articles that the society is in need of. This process need not necessarily put our
identity at risk, nor will it undermine the cultures of any of the ethnic groups and
communities. Modernization does not imply the substitution of an alien culture
for our own. It is nothing more than the process of updating our outlook and
behavior. It predicates a change of direction, and the role of education is to give
it momentum. But it is imperative that the goal be definite. The overriding goal
of education is to develop human resources in the course of nation-building.
However, development of human resources is not an end in itself. Its real test is
how far it succeeds in fostering the habit of self-reliance and in carrying
conviction that the knowledge and skill acquired can be put to the individual's
own use.
6) Conservation of Natural Environment and National Heritage: Education should advance the cause of natural environment and national heritage. The civic sense of the individual combined with his aesthetic awareness and love of nature is certainly a positive factor, holding out hopes that this God's good earth will be kept as a clean, beautiful and pollution-free thing for the generations yet unborn. But that alone may not be sufficient to save the world from the impending environmental disaster. If, on the one hand, damage of environment has sent shock waves around the world, the ever-increasing volume of population, construction works, industrialization and pollution are precipitating changes in the natural environment on the other. The world is focusing its attention on environmental education and conservation of nature. In the context of Nepal this question can be dealt with in two ways. First, environmental education should be integrated with all levels of education from the bottom up under a new curriculum. Secondly, the awareness of environmental purity should be instilled in the minds of the people with the help of both formal and non-formal education.

Education should contribute to maximizing the use of manpower in the national construction and to raising the standard of living of the common man. To this end, a scheme should be worked out for propagating job-oriented basic skills and basic literacy. If the farmers, who constitute the bulk of population, could be drawn towards local-level small industries, the concept of balanced regional development would receive a shot in the arm. It would also lead to the preservation of some traditional technologies. In this connection the role of education should be to impart technical and vocational education of the appropriate level, to operate different kinds of skill-based industries at the local level, and to simplify and facilitate the means of livelihood through the use of local resources. In a pre-dominantly agricultural country like Nepal conditions should be created where the farm output is increased through the optimum exploitation of the arable land, such an approach will improve the living standards of most of the people who have no other means than farming to make both ends meet, its indirect and less obvious consequence will be to accelerate the economic growth of the country. Agricultural study cum extension programme should be expanded on a regional basis to upgrade the traditional farming methods and to boost up the productivity of land. Besides, study cum teaching of the art and science of stock-farming should be stepped up to ensure corresponding development of the livestock.

7) Assimilation of the backward sections of the Population into the National Main Stream: Education should provide, in particular, women, the physically and mentally disabled, and the economically disadvantaged individuals with the means of earning a livelihood. If one section of the society becomes educated, cultured and affluent, while another section is steeped in poverty and ignorance, it cannot be described as a healthy development. In view of the position which women occupy in the society, priority should be given to give them appropriate place in all kinds of educational activities so that they become partners in the crusade for social reconstruction and national development. It will require a lot more time in improving the present condition of female education, unless special consideration is shown to women without compromising the quality of education and norms of social justice. On the other hand, economic development will fail
to gather as much momentum as it should. Besides, special type of educational programmes should be brought forward for their benefit.

The physically and mentally handicapped require a special kind of education, depending on the nature of their disabilities. People who have minor impairments may be integrated into the society, after educating them in the local general schools. All that they will stand in need of is priority, encouragement and support. However, the blind, the deaf and the dumb, and the mentally retarded need special education, not as an act of charity, but as part of the fulfillment of every citizen's right to education. This attitude alone will meet the requirements of the welfare State as envisaged by the Constitution.

In the multi-ethnic society of Nepal there are still some castes and communities that lie far behind from the economic, social and geographic points of view, and it is feared that they will go further down on the scale, unless, timely efforts are not made to raise them tip. Priority should be given to basic literacy and skill development along with the provision of facilities for primary education as part of the effort to change their socio-economic status. Another thing that could be done for the amelioration of their condition is to provide the able and talented members of such backward tribes and communities with progressive opportunities for higher education.

In the light of what has been discussed above, the goals of national education are laid down as follows

1) To help bring out the genius inherent in each individual, and to open up the avenue for exploring the possibilities of personality development:

2) To promote the respect for human values, and national and social norms and beliefs in each individual for the sake of healthy social life:

3) To accelerate the socialization of the individual as part of the effort to strengthen social integrity:

4) To enable the individual to live in harmony with the modern age and in tune with national and international milieu without jeopardizing his own identity:

5) To stimulate the Modernization of the society, and to develop human resources necessary for nation-building:

6) To inculcate the need to preserve natural environment and to conserve national heritage: and

7) To assimilate the backward sections of the society into the national mainstream.

3. Structure of Education:

In keeping with the above national goals of education, the Commission has recommended a new educational structure in place of the old format. There are three modes of imparting knowledge and skill: formal, non-formal and vocational. A full-time student acquires formal education. The traditional channels open for it are schools, colleges and universities.
A person can be educated in a non-formal environment; too, Literacy drive, functional adult education and women's programme may be cited as some examples of this genre. Vocational education belongs to a separate category, which lays emphasis more on skill than on knowledge. In the proposed structure of national education, an attempt has been made to integrate formal, non-formal, and technical cum vocational education, wherever possible.

**Primary Level:** The main aim of national education in this sector is to make primary education available to all. Education given from class 1 to 3 is equated with the non-formal education and skill propagation. Basic literacy and mathematical skill of the non-formal education has been viewed as the basic level and the starting point of the vocational has been regarded as basic skill training.
Thus, by keeping all the three kinds of education at the basic level, they are presented as the minimum knowledge required for earning a living.

If, for one reason or another, a person is unable to receive formal education, he may informally participate in different programmes as part of his educational process. There should be new basic schools with classes from 1 to 3. They should be set up in various places for the convenience of the linguistic communities, and the children of the school-going age: and multi-class schools may also be established, where necessary.

Primary schools must have 5 classes, and the provision of 3-class schools has been deemed essential for the convenience of the school-going children. Non-governmental organizations (NGOs) should be encouraged to grant primary-level education on a non-formal basis, and the students equipped with such education should be admitted to the formal education after passing the entrance test.

Secondary Level: Secondary education will have three tiers-
- Lower secondary. (classes 6-8).
- Secondary (classes 8-10).
- Higher secondary (classes 10-12).

Secondary schools will have 2 classes. 9 and 10. running for 2 years, and students, taking vocational subjects and Sanskrit and other subjects as optional and extra optional subjects, will branch out for specialization in those areas. Persons, receiving non-formal education may also sit for the formal examination of the secondary level.

The 2-year formal education at the end of the secondary classes will be regarded as higher secondary education. In general students, who pass SLC at the age of 15 on average are not physically and mentally mature enough for the university education. They will do better if they can get higher education in their own familiar environment. It is for this reason that the higher secondary level has been conceived of as the first phase of specialization.

There will be five areas of specialization: General, technical, polytechnic professional, and Sanskrit. The present Proficiency Certificate level will be equivalent to the higher secondary level, and the former will be transferred from the University to the Higher Secondary Education Council by the year 2000.

Higher Education: There will be provision for higher education in general, professional, Sanskrit, science and technology, and polytechnic subjects. It will have 4 levels: Graduate, post-graduate, M. Phil, and doctorate. Courses of study in general subjects, management, science and Sanskrit will ordinarily extend for 3 years for ordinary graduation or graduation with honors. Students completing 3 years at the graduate level in professional subjects will be taught for one more year at the graduate level, and persons having requisite qualifications, will be admitted to the 2-year B.L. course. Graduate-level courses in professional subjects will be of different durations.

Student graduating in general subjects, Sanskrit, professional and science subjects will be admitted to 2-year post-graduate classes. Periodic post-graduate courses will
also be offered for their benefit. At the same time, technical corporations may also operate their own post-graduate-level courses. Post-graduate students, obtaining the required percentage of marks, may seek admission to the 1-year M.Phil course, which will be a pre-requisite for Ph.D. A person having passed M.Phil. or meeting the conditions laid down by the Faculty concerned, may choose one of the courses of study for his doctorate. Its duration will be from 2 years at least to 5 years at most.

**Non-formal Education:** Persons unable to go in for formal education of their choice, will be provided with chances for non-formal education. This type of education cannot be stratified into layers. Nevertheless, it may be divided into three levels, namely, basic level, middle level and high level. The literacy grade laid down at the national level will constitute the basic level. After deciding how much of the three Rs a Nepali literate should have, basic literacy courses will be put under way. People completing literacy courses, will be eligible for admission to any class of a primary school; and students, dropping out from schools for any reason, may catch up with others by keeping up his studies non-formally. At present, basic literacy programmes are in operation for the adults as adult education programme, for boys and girls as children's education programme and for women as women's programme, which is a clear indication that basic literacy courses will have to be launched on a wider scale in future.

Basic literacy opens the door of self-study and self-improvement. Nevertheless, medium level non-formal education programmes of various types will be launched to provide opportunities for gaining more knowledge and skill to persons who have completed the basic literacy course. In particular, open schools and different tiers of vocational education may be of assistance to those who aspire to gain admission to different levels of formal education. Such schools may be operated in the private sector by individuals or by the community itself.

In particular, ‘bridge courses’ may be offered in some subjects for the students coming from vocational and technical areas. In the examination for high-level technical studies individuals may appear as private candidates and may get through on the basis of self-study. Correspondence courses and other modes of distance learning courses, regularly offered on Radio and TV by open universities may be utilized by those who are not in a position to enter the formal university for higher education. The proposed Open University should run regular classes, on top of conducting examinations for private candidates, through open tearing methods.

**4. National Policy on Education:**

The national policies on education are determined by two factors: the national goals of education, and the structural form of education. In this Report they are presented in the various chapters, where they have relevance. Presented below are some basic policies, which, being connected with more than one facets of education, are extensive in nature.

1) The following steps should be taken to develop the genius inherent in the individual:

   a) To universalize primary education:
b) To conduct different non-formal courses for those who are deprived of the opportunity to receive class-room education;

c) To provide talented, competent, industrious and efficient persons with incentives and opportunities for higher education in appropriate subjects.

2) To build up a healthy society supreme human values and social norms and beliefs should be included from the primary to the higher levels of educational courses in an appropriate and relevant manner.

3) To facilitate socialization and strengthen social integrity the following measures should be adopted:

a) To encourage and provide primary education through the mother tongue in response to the wishes of the various linguistic groups:

b) To impart higher education through the medium of Nepali, as it is the national language, and the language of State business:

c) To enable the individual to make creative contributions to various forms of literature, and art and culture in the national language and other native languages:

d) To stimulate higher studies and researches on the various aspects of science and technology that have a direct bearing on the Nepalese life:

e) To set up a national-level research institution, charged with improving the standard of Nepali and other native languages of Nepal:

f) To increase the knowledge and understanding of different aspects of the national life by adjusting them in the courses of study in an appropriate manner.

4) The following policies should be pursued to enable the individual to live in harmony with the national and international environment of today, without losing his identity:

a) To accord priority to the teaching of the English language as a separate subject with due regard to its role as an international language:

b) To promote the teaching of the languages of the neighboring countries and other countries as required:

c) To encourage the comparative study of human behavior, and culture and other creative aspects of man in the national and international context.

5) The following policy guide-lines should be laid down to develop human resources, to modernize the society, and to enlist cooperation in the national construction through the medium of education:

a) To adjust the teaching of science at every level of education in order to build up the scientific sense in the society;
b) To give priority to the development of science and technology, and to establish additional centres of higher learning;

c) To erect a technical school at each regional development centre and to set up other technical institutions under it as required.

6) The following policies should be adopted to conserve natural environment and national heritage.

a) To include environmental teaching at every level of education;

b) To impart non-formal education in environmental protection and agricultural development through the mass media:

c) To expand learning, teaching and research works on environmental education;

d) To include agricultural education from the primary level, as agriculture has a vital bearing on the national wealth:

e) To consolidate and expand study and research on agriculture:

f) To develop and expand technical and vocational educational all over the country in order to utilize the idle workforce.

7) The following arrangements should be made to absorb the backward sections of the society into the national main stream.

a) To encourage and give priority to women at all levels of education;

b) To take appropriate steps for educating the handicapped children to the highest level:

c) To provide education and training for the uplift of tribes and communities which are lagging behind in socio-economic terms:

d) To provide special education for the disabled children and orphans:

e) To make adequate arrangements for the expansion of education in geographically disadvantageous areas.

5. Educational Management:

National education should be extensive in scope and high in standard, if the national goals of education are to be fully realized. To this end, the structure of education should be changed to suit the spirit of the time, the quality of education should be enhanced in a planned manner, and its management side should be bolstered.

8) The following changes should be introduced in the current format of formal education.
a) To recognize classes from 1 to 3 of the primary level (1-5) as basic education;

b) To recognize classes 6-8 of the secondary level as lower secondary education, classes 9-10 as secondary education, and 10+2 as higher secondary education;

c) To reduce, in general, the duration of the graduate course for general subjects, science, pedagogy, management and Sanskrit, with or without honors, to 3 years;

d) To conduct post-graduate course for diploma or M. Phil., and to make it compulsory for doctorate.

9) The following steps should be taken to expand the process of acquiring non-formal education.

a) To lay down the national definition of literacy;

b) To allow transition from non-formal to formal education;

c) To diffuse non-formal education through open schools and universities;

d) To provide for non-formal education through various methods, such as correspondence course, and education by Radio and TV.

10) Technical and vocational education should include the following.

a) To disseminate basic skill training on a non-formal basis;

b) To impart medium- and high-level trainings through vocational centres;

c) To give high-level training through polytechnic institutes.

11) Another important aspect of educational development is to raise the quality of education. The following measures should be instituted for that purpose.

a) To make it obligatory to pass the entrance test as prescribed by the institution concerned for getting admission to different levels of formal education, including technical and vocational education;

b) To diversify the educational methodology in order to make teaching effective and pupil-centered;

c) To require the teachers of all schools to receive training;

d) To make it obligatory for all teachers working at the higher-education level, to have post-graduate training, or M.Phil., or Ph.D.

e) To standardize and update the assessment system, and do systematize and regularize examinations;

f) To enhance studiousness at all levels of education with the provision of
libraries with the minimum required number of books and magazines;

g) To ensure the security of service of teachers of all categories and to safeguard their rights and interests, as they are the backbone of any educational system;

h) To imbue the teachers with a greater sense of responsibility towards their students, as they have a leading role to play in the latter's academic achievement;

i) To oblige the teachers and educational administrators to build up the academic atmosphere by refraining from active politics;

j) To stimulate the initiation of miscellaneous programmes, at all levels of education, calculated to promote the physical, mental and emotional well-being of the students, apart from teaching and learning;

k) To make timely improvements in the syllabi, keeping in view the advancements in the sphere of knowledge and skill, and the changes occurring in the theory and methodology of education;

l) To have the text-books written, published and marketed on a competitive basis with the aim of ensuring qualitative improvement;

m) To encourage the establishment of schools, colleges, and other seats of learning in the private sector;

n) To improve school education, and to make the inspection system more effective by dividing them into groups;

o) To set up a University Grants Commission, charged with coordinating and evaluating the academic activities, and providing public grants with a view to raising the standards of higher education;

p) To decentralize the present centralized system of higher education, and to realize in practice the concept of the 'multiversity';

q) To commission units of different levels with the responsibility for framing policies and implementing programmes relating to different aspects of education, and to strengthen the existing management; and

r) To raise the level of national investment in promoting to the expansion and consolidation of national education, in addition to mobilizing internal and external resources.
2. PRIMARY EDUCATION

1. Background:

In Nepal the simple fact that national prosperity hinges on educational development has been realized in the true sense of the term only since the advent of democracy in 1951. A survey of the educational scene since then appears to bear out the oft-repeated claim that it has taken a great leap forward in the field of education. The National Education Planning Commission of 1954-1956, the Comprehensive National Education Committee of 1961, the National Education Advisory Council of 1967, the National Education System Plan of 1971, and the Basic and Primary Education Programme, among others may be taken as milestones in the onward march of education.

However, the fact remains that, in spite of these efforts, Nepal trails far behind in comparison to other developing countries. A huge proportion of the population continues to live in the shadow of illiteracy. The basic primary education is still struggling hard to strike its roots at the popular level.

After the restoration of democracy around the beginning of 1990, more energetic steps have been taken to bring education within the reach of all. Nepal has agreed to the recommendations of the World Conference on Education for All held in Thailand in 1990. Nepal has also approved the World Declaration on the Protection, Preservation and Development of Children adopted by the World Summit on Children, held in the USA in September 1990. In this connection, it has drawn up its work-plan in line with the programme finalized for implementation in the 1990s. It aims at increasing the primary school enrolment from the present 67 per cent to 100 per cent, and to raise the enrolment of girls from the present 31 per cent to 100 per cent by the year 2000. Another target is to raise the percentage of the children completing primary education from the present 27 per cent to 70 per cent. Initial steps have already been taken to meet these targets, and the formulation of the Master Plan for Basic Primary Education and the appointment of the National Education Commission should be viewed against this backdrop. On this showing, it will be obvious that appropriate reformative measures in the field of primary education can be recommended only after examining the current status and problems of the basic primary education. What follows is an attempt at briefly reviewing the basic primary education as it exists now.

2. Present Situation: The quantitative increase in primary education from 1951 to date is shown in Table 1 below. The picture it reveals is that, compared to the base year, when only a negligible proportion of school-going children were enrolled, the real percentage in 1990 was 79.6. It was a scale of accomplishment, which cannot but be described as remarkable.
Table 1

PRIMARY EDUCATION (1950 - 1980)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>321</td>
<td>7256</td>
<td>8314</td>
<td>10130</td>
<td>11873</td>
<td>17842</td>
</tr>
<tr>
<td>Teacher</td>
<td>8505</td>
<td>N/A</td>
<td>18874</td>
<td>27805</td>
<td>51266</td>
<td>71213</td>
</tr>
<tr>
<td>Student</td>
<td>N/A</td>
<td>449141</td>
<td>458516</td>
<td>1067913</td>
<td>1812098</td>
<td>2788644</td>
</tr>
<tr>
<td>Girl %</td>
<td>N/A</td>
<td>N/A</td>
<td>18.3</td>
<td>28</td>
<td>29.4</td>
<td>36</td>
</tr>
<tr>
<td>Gross Enrollment (Total) %</td>
<td>0.9</td>
<td>32</td>
<td>43.2</td>
<td>90.4</td>
<td>77</td>
<td>107</td>
</tr>
<tr>
<td>Gross Enrollment (girls) %</td>
<td>N/A</td>
<td>N/A</td>
<td>16.5</td>
<td>N/A</td>
<td>47</td>
<td>81</td>
</tr>
<tr>
<td>Net Enrollment (Total) %</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>57</td>
<td>79.6</td>
</tr>
<tr>
<td>Net Enrollment (girls) %</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>60.5</td>
</tr>
</tbody>
</table>

Source: Statistics and Manpower Section, Planning Division, Ministry of Education and Culture, Kaiser Mahal

Several factors have been responsible for this impressive upswing of the curve. Chief among them are: 1. Growing educational consciousness since the introduction of democracy in 1950/51, 2. Popularization of the concept of education as the means of developing human resources, 3. Growing belief among the enlightened sections of the society in the need of education for social progress, and 4. Impact on Nepal of the world-wide view that democracy and the national development of education, and science and technology are inter-locked.

All these factors have combined to give the impression that quite a remarkable success has been scored on the educational front. However, the true state of affairs will come to light only when the spotlight is turned on the qualitative aspects on the basis of the following:

**Educational Opportunity and Achievement:** If school facility is to be taken as educational opportunity, the high mountainous areas seem to have been singularly blessed. In contrast, the Tarai is at some disadvantage along with some lower hilly areas. Even in districts, where the facilities are adequate, they are not equally taken advantage of. For example, out of 75, 42 districts have wider educational opportunities, but only 27 of them have correspondingly bigger enrolment, with the high-altitude areas taking the lead.

There is a variety of problems associated with the proliferation of educational opportunities and increment of student participation. Nevertheless, the question of student participation appears to be more complex. In this connection, one thing can
be stated with absolute clarity, namely, that although school facility is essential to student participation, the former does not necessarily generate a greater number of participants. This observation applies with greater effect in respect to girl students and backward classes. Studies have borne out the fact that factors like family condition, sex and teaching environment are intimately connected with student participation. An overall analysis brings out the fact that student participation is a function of the economic status of the family, the social and cultural environment of the community, and the class-room atmosphere.

**Built-in Efficiency of the Educational System:** According to the analysis of the efficacy of primary education till now, only a small proportion of the entrants makes grade regularly and passes out at the end of five years. A study has shown that on average it takes 12 years to cross the primary stage, which means that the efficiency of the educational system stands at 40 per cent. However, if account is taken of another study, which puts the duration at 9 years, the efficiency of the system appears to be 53 per cent. Anyway, these studies make it sufficiently clear that the educational system is running at a great loss.

Such losses occur mostly in the lower classes, more particularly in class one, where a large number of children either drop out or get stuck up. The loss is greater because the number of drop-outs is greater than that of the stuck-ups. The question of efficiency looks more ominous in relation to girl students. Had the educational system been efficient, some amount could have been saved from the cost involved in each student passing the primary level. Such educational losses are decreasing in connection with the boy students. However, so far as the girl students are concerned, they are estimated to have remained as they were. The study on the time taken to complete the prescribed course showed that the capacity was rated at 28 per cent only even in schools where the Primary Education Project was in force. On this showing, it can be easily imagined that the rate in other schools will be still lower. On the whole, therefore, it can be concluded, first, that the student participation has not substantially increased and, secondly, that the real achievement in terms of grade promotion is very low.

**Relevance and Quality of Primary Education:** Viewed from the changed politico-economic environment of the country and the changed world order, our primary education seems to be limited to literacy alone. In particular, it lacks functional elements. It has been recognized that it is incapable of responding to any social need to any appropriate extent. Laying emphasis as it does on bookish knowledge, it has not been able to fulfill any of the developmental needs of the children, not to speak of the national development. On this showing, it may be concluded that education has been able to meet none of the national, social and individual requirements.

It has been found that the curriculum of primary education has not yet been designed to bestow skills of practical use to a sufficient degree. It is neither interesting to the children, nor is it suited to the rural environment. The subjects and activities under it are found to be relevant to some of the well-placed urban areas. For these reasons, most of the children are alienated from the tutorial activities of the schools, and stay away from them. To explain the phenomenon of low enrolment economic reasons have been advanced with greater frequency with no attention given to the fact that the irrelevance of the curriculum could be the villain of the piece. In fact, a curriculum which is out of tune has caused loss in two ways. First, for lack of
interest in orthodox bookish activities, the students drop out from the schools. Second, if they manage to stay on, they will estrange themselves from their cultural environment. In this way, it has been seen that at the end of the day they come home without learning anything of practical use to them. If they hold out for some years under that system, they will run off to the cities in search of the new environment as soon as they are out from it.

In other words, the main task of education, which should be to reform the rural milieu, is nowhere near success. It should be noted that in almost all the subjects taught in the school the average achievement of the students is below 50 per cent on average. Moreover, the children, belonging to the farmer and other working families, have been found to lag behind the wards in charge of urban patrons.

**Curriculum, Text-book and Education Material:** Mention has been made above of the broad-based social and national relevance of primary education. It is also full of flaws even from the strictly academic point of view. Chiefly it has laid emphasis on the collection of subjects only. Especially since the terminal point of school education is the SLC, experts, teachers and educational administrators talk of the curriculum of primary education with an eye on the subjects to be learnt in the upper classes. That is to say the curriculum of secondary education casts its shadow on that of primary education.

No coordinated effort has so far been made to see that the prescribed syllabus is adhered to, or to make suitable amendments to it. Instead of developing the courses of study along objective lines, they appear to be the outcome of the intellectual exercise of specialists and scholars. Burning topics like the conservation of the natural environment has not figured in the curricula. Almost no attempt has been made to make real assessment sector-wise. Similarly any attempt at affecting a balance among subjects in the text-books has been seldom made. Since they have not been produced on the basis of examination, the specialties inherent in them depend more or less, on the discretion of the author.

Except text-books, there are virtually no other educational materials. Under some projects educational materials have been brought out to a limited extent, but they have not been properly utilized even in those projects. Other educational and teaching adjuncts are almost non-existent. Under the present circumstances, only text-books dominate the scene as the biggest single teaching tool.

**Teacher Training:** The condition of the teachers, who constitute an important ingredient of the education system, leaves much to be desired. At present about 50 per cent of them, working at the primary level, is trained, but those, having the minimum prescribed training and qualification constitute only 30 per cent. Among them the percentage of women is pitifully low. Manned by less than one-third of the trained teachers, the primary education cannot be expected to be of a high standard.

At present, no training is obligatory for taking up the teaching profession. It has not been considered an essential pre-requisite. Any person certified to have passed an ordinary entrance examination may become a teacher. A person who has no knowledge of the technical nature of the teaching/learning process can become a teacher without any difficulty.
Primary education has been recognized as basic education. But it does not enjoy any social prestige. A teacher receives in-service training only, and that too mostly of a theoretical nature. Only very few person seem to have taken advantage of the pre-service training, organized by the university. Even that training has not much practical relevance. Refresher courses are available to a negligible extent. They too are not centered on any aspects of specialized skill, and are of a general nature. For all these reasons the condition of the teachers seems to be pitiable and neglected, casting a negative influence on the effectiveness of primary education.

**School Environment**: The teaching/learning situation in primary schools is rather depressing. They are not open as prescribed. If they do, the presence of teachers, and specially students, is very low. Even if the teachers and students are present in sufficient number, the atmosphere is not favorable. Almost everywhere teachers are seen hanging around, without taking classes regularly. Whatever the amount of teaching, its quality and content in reality is, theoretical and bookish.

Students are encouraged to learn by rote, and assessments are made on the same basis. In the absence of realistic activities, what the students learn is devoid of meaning. Theory is never applied in practice. No matter how hard the teachers try, they cannot achieve much, because the right atmosphere is not there. Most of the schools have no educational materials to speak of, and if there are any, there is no means to keep them properly. In some extreme cases lack of even such simple ingredients like blackboards and chalks has been noticed.

**Educational Management**: The weakest and most neglected side of primary education is management. They lack the sense of responsibility. Schools do not keep the prescribed hours. Absenteeism is a chronic feature. Inventory is not maintained in proper order. Class-rooms are dirty and look unkempt. Seating arrangement is in disarray. Reading materials are in a state of disorder.

No attempt has been made to make a proper evaluation of the qualifications and efficiency of the teachers. District Education Offices function as salary distributing, account keeping, and transferring agencies. They do not have inspectors in sufficient numbers. Whatever there are, they do not have any definite programme of inspection. Such inspectors, as there are, do not carry out their designated duties, and there is no budgetary provision as required.

There are, of course. District and Regional Offices, but they do not have the authority to function freely, because the de-centralization system has not taken effect in practice. They function like intermediaries, transmitting the directives from the department to the field offices. The posts of educational administrators are not sufficient in number, and educational management has not been recognized as a technical service. Nomenclatures and organizational forms have been changed from time to time in the name of administrative management reform. But the implementation has always remained the sticking point. There is no policy framework to check the standards of private schools, and there is no provision for inspecting them.

**Financial Position**: Primary education, which, as basic education, has been made free, is wholly financed by His Majesty's Government on its operational side. It has been increasing its outlay on this sector over the past plan periods.
Nevertheless, compared with other developing countries, the amount set aside for the educational sector is rather low. Chiefly, the disbursement takes the form of administrative expenses. Although such expenses have been categorized as development expenditure and regular expenditure, the amount given as grants to various schools are shown as development expenditure, in spite of the fact that 95 per cent of it is accounted for by salaries.

No satisfactory mobilization of resources at the local level has been effected except in the form of jerry-built primary school buildings. The number of teachers should be correlated with the number of students, necessitating the increment of the former almost every year, and the amount of grant should be augmented accordingly.

A certain portion of the outlay on education is borne by foreign donors, the greater proportion being in the form of loan. The investment in primary education bears fruit in the long run only. For this reason the loan investment in this area is quite worthwhile. But if it was not geared to the real needs of the consumers, or if, due to managerial short-comings, it failed to be productive, it would lead to frustration.

Taken all in all, the outlays on education have not been satisfactory. Even in the rural areas the poor parents are seen to have admitted their children to private schools, even though they charge a substantial amount as fees. This fact may be taken as an unmistakable indication that, if quality could be assured, financial mobilization would not be a problem even in the villages.

3. Outstanding Problems: It would not be out of place at this stage to discuss some of the outstanding problems, facing primary education in Nepal.

Educational Opportunity and Utilization:

(1) Enrolment has not kept pace with the multiplication of schools in any remarkable manner.

(2) On top of that., the enrolment of girls and children, belonging to the backward sections of the society, has been remarkably low.

(3) Educational opportunities could not be evenly made available in all parts of the country for various reasons, chiefly difficult terrain features. But

(4) whatever the difficulties, there is a strong case for speeding up both the educational opportunities and their utilization.

Educational Quality and Effectiveness: The big question, facing the basic cum primary education in Nepal is not just quantitative development. The bigger issue is qualitative increase. To this end, the first thing that has to be taken in hand is to make the education system effective. And there is yet another thing that has to be borne in mind, namely, the quality of the finished products must be of a high order for the sake of national development.

Evolution of Non-formal Education as a Complement to Primary Education: Formal education alone may not be sufficient, if education is to be made available for all. Hence, the expansion of non-formal education is a prime necessity for the
development of primary education.

**Mobilization of Economic Resources:** Till now governmental financial involvement has been prominent in Primary education. It is necessary that public responsibility should be gradually widened to make primary education universally available. However, any attempt at depending solely on public resources will make it an uphill task. The main point at issue is how and to what extent the private and local resources can be funneled in this direction.

**Nature and Form of Educational Improvement:** The professed aim is to make basic primary education available to all by the year 2000. But the efforts till now do not appear to have laid down a clear and convenient path, leading to that goal. A big chunk of children continues to remain outside the primary education system. Both the boys and girls should have equal opportunities for entering the primary education system and it should be equally convenient for both of them. Only then can the number of enrolment increase. That is to say equality of opportunity and participation may be described as one side of the coin.

Of the boys and girls who are absorbed into the system • the first thing to be noted is that they have not been able to take full advantage of the current system. The problem of drop-outs and repeaters are manifest on a wide scale. Moreover, the achievement of those who have passed is not satisfactory in terms of quality. In the final analysis, therefore, it appears that the want of effectiveness and quality in the final product is the other and more deplorable side of the coin. The Important question that deserves serious consideration is how to boost up the effectiveness and quality of the system.

With this question are inter-linked other urgent questions among them the one that merits special mention is educational management. The central arena of primary education is primary school. In its management are involved the Principal, the Board of Directors, District Education Office, and other local bodies. The outstanding question, in this connection, is how to fix the responsibilities of each of them, and how to strike a balance between their rights and duties.

Until now the entire responsibility for primary education has rested with the government. Since primary education has been declared free, the government has been providing grants to cover the salaries of the teachers, causing a steep rise in government expenditure. But the quality of education continues to be affected by other financial problems concerning the management and operational matters of the school. Other problems that have to be sorted out are: official policy on monetary grants, provision for the mounting cost of education, financial sources, foreign grants or loan assistance for primary education, the autonomy and academic freedom of the schools, operating in the private sector.

There is the need for making the primary education curriculum more practical and relevant to the realities prevailing in the country. Instead of making it uniform throughout the county, thought should be given to diversify it according to the specific requirements of each region. Other relevant issues are the practical provisions for imparting primary education through the medium of mother tongue as required in the present context, and the place of English in the scheme of things. The question of producing text-books and other reading materials, improvement of
schools, teacher training, provision for effective evaluation and inspection in the interest of teaching quality deserve equally serious attention. In view of the geographic situation of the country, we should have a very clear conception of what should be done to broaden and standardize primary education. Inspection, evaluation, monitoring and follow-ups, which are essential to primary education as a whole, should be provided both at the local or national level.

4. **Recommendations**: The following recommendations are made for the timely improvement of primary education:-

1. To define the fundamental objective of primary education as the development of the inborn abilities of the children under a pupil-centered system, development of skills in the three Rs, so essential to daily life, inculcation of qualities like honesty, self-reliance, and industry in the broader context of pragmatic values, morals and beliefs, and development of civic, scientific, and environmental sense;

2. To fix the duration of primary education for 5 years, and 6 years to be the age of enrolment.

3. To make structural adjustment in the current primary education in such a way as to recognize Grades 1-3 as basic primary education equivalent to the basic literacy of non-formal education, to establish basic schools in addition to primary schools with the aim of making basic primary education available to all and for the convenience of school-going children, and to adopt a multi-tier teaching system in places where the student population is thin, provided that at least 2 teachers are appointed to run it;

4. To pay attention to providing practical knowledge about agriculture and environment through the medium of kitchen garden flower garden, and plantation of fruit saplings, as they have a practical bearing on human life;

5. To orient towards hygiene and sanitation together with handicraft, painting and other arts through the medium of practical activities:

6. To require the Ministry of Education and Culture to prepare and enforce a national programme for primary education by amending and improving the existing syllabus with the goals of primary education in view;

7. To allow a school or a community to create and apply a separate syllabus of its own, it's on testing, it is found to be in harmony with the aims and objectives of national education;

8. To permit the use of a language other than Nepali as the medium of instruction in areas where Nepali is not the mother tongue, basically, as is advisable, reading and writing are conducted in Nepali with instructions and explanations given in the mother tongue of the area, provided that the reading materials become available in sufficient quantity;

9. To encourage the children, living in multi-linguistic communities, to learn the mother tongue of the locality;
10. To undertake the teaching of subjects as shown in Table 2 below:

**Table 2**

**Subjects and Distribution of Marks**

<table>
<thead>
<tr>
<th>S.N</th>
<th>Subject</th>
<th>Class or Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Nepali</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Mother Tongue or other language</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>English</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Mathematics</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Social Studies</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Hygiene, sanitation and environment</td>
<td>50</td>
</tr>
<tr>
<td>7</td>
<td>Art (Handicraft and painting etc.)</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>Science</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Total</td>
<td>500</td>
</tr>
</tbody>
</table>

11. To maintain and add, along with text-books, a stock of illustrated books, children's literature, and reference books on science, language, etc. for the joint or individual reading of the children, so that it eventually grows into a library;

12. To make available to all schools a certain sum each year to buy the reading materials mentioned above, to ensure that each school has blackboards and chalks, and to require the basic and primary schools to keep on increasing the quantum of educational materials;

13. To organize on a regular basis different competitive activities like sports, scouting, and cleanliness, and to maintain a minimum supply of equipment required for them;

14. To evolve a regular practice of evaluating the students, and to maintain a record of each student's involvement with homework, viva voce, and extracurricular activities along with the class test at the end of each lesson;

15. To form a Board, consisting of the Head Master of the school concerned and a teacher deputed by the Head Master of the Local Resource Centre, to conduct written examination and oral interview at the end of Grade 3, to assess and grade the achievement of each student, and to forward the results to the District Education Office along with the criteria of the examination;

16. To assess the performance in Grades 4 and 5 on the basis of practical and written examinations, and to require the District Education Officer to conduct the final examination of Grade 5;
17. To give priority to the candidate who is conversant with the mother tongue of the children, while appointing teachers for secondary education, and to see that each school has at least one female teacher;

18. To encourage the community or local units to contribute to universalizing primary education by opening primary schools;

19. To have a separate management for each primary school, provided that a secondary school, combining primary classes, is allowed to function under one management;

20. To arrange the inspection of educational management and teaching activities of primary schools by the Resource Centre, and to form them into groups for this purpose.
3. SECONDARY AND HIGHER SECONDARY EDUCATION

Background:

In the educational system of any country secondary education occupies a position of pre-eminence. Nepal is no exception in this regard. Unfortunately, however, it has not received as much attention as it should over the past decade producing some adverse effects. For instance, during the seventh plan period a policy to discourage the opening of new secondary schools was adopted and no arrangement was made to provide them grants. But the social pressure for more secondary schools could by no means be resisted. The result was that they were set up with the help of their own resources, and were called 'proposed secondary schools'. Tolerated by the government, they managed to survive somehow, with the lingering hope that someday the government would have second thoughts about them. They numbered 256 in 1991/92.

From 1950/51, when there were not more than 11 secondary schools, Nepal attained the position of having 2000 of them in 1990/91, after 4 decades. According to statistics, Nepal had 3,964 lower secondary schools and 1,953 secondary schools in 1990/91 with the student population of 344,138 and 364,525 respectively.

2. Present Situation

The evolution of secondary education is a natural process, a logical response to the multiplication of primary schools, as it is apparent from the following Table 1:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower secondary school</td>
<td>3578</td>
<td>3729</td>
<td>3824</td>
<td>3897</td>
<td>3941</td>
<td>3964</td>
</tr>
<tr>
<td>2</td>
<td>Secondary school</td>
<td>1321</td>
<td>1411</td>
<td>1501</td>
<td>1638</td>
<td>1791</td>
<td>1953</td>
</tr>
<tr>
<td>3</td>
<td>Lower secondary school student</td>
<td>254354</td>
<td>271244</td>
<td>289594</td>
<td>305409</td>
<td>325237</td>
<td>344138</td>
</tr>
<tr>
<td>4</td>
<td>Secondary school student</td>
<td>242467</td>
<td>268805</td>
<td>289923</td>
<td>307534</td>
<td>338779</td>
<td>364525</td>
</tr>
<tr>
<td>5</td>
<td>Lower secondary school growth %</td>
<td>6.5</td>
<td>6.6</td>
<td>6.8</td>
<td>5.5</td>
<td>6.5</td>
<td>5.8</td>
</tr>
<tr>
<td>6</td>
<td>Secondary school growth %</td>
<td>12.0</td>
<td>10.9</td>
<td>7.9</td>
<td>6.1</td>
<td>10.2</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Expansion in the size of the student population is of course a matter of satisfaction. However, the efficiency of any school is measured by the number which
successfully completes the course of study. Among the students joining our schools there is an excessive amount of drop-outs, causing wastage and loss of the money invested in education. as confirmed by Table 2 below:

**Table 2**

No.of Students in Lower Secondary and Secondary Classes in 1990/91

<table>
<thead>
<tr>
<th>Class</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>183593</td>
<td>160545</td>
<td>133188</td>
<td>119395</td>
<td>111972</td>
<td>708633</td>
</tr>
</tbody>
</table>

**Table 3**

% of Students Passng SLC

<table>
<thead>
<tr>
<th>Year</th>
<th>Examinees</th>
<th>Successful candidates</th>
<th>% of successful candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983/84</td>
<td>100001</td>
<td>23624</td>
<td>23.8</td>
</tr>
<tr>
<td>1984/85</td>
<td>100001</td>
<td>23624</td>
<td>23.6</td>
</tr>
<tr>
<td>1985/86</td>
<td>99862</td>
<td>29546</td>
<td>29.6</td>
</tr>
<tr>
<td>1986/87</td>
<td>52551</td>
<td>15180</td>
<td>28.9</td>
</tr>
<tr>
<td>1987/88</td>
<td>41351</td>
<td>17201</td>
<td>41.6</td>
</tr>
<tr>
<td>1988/89</td>
<td>50495</td>
<td>18402</td>
<td>36.4</td>
</tr>
<tr>
<td>1989/90</td>
<td>56870</td>
<td>19291</td>
<td>33.9</td>
</tr>
<tr>
<td>1990/91</td>
<td>64166</td>
<td>28319</td>
<td>44.1</td>
</tr>
</tbody>
</table>

Enrolment in a school is affected by the local geographic conditions and density of population. In some districts in Nepal these factors have contributed to a wide discrepancy in the school/student ratio, as evidenced by Table 4 below:

**Table 4**

Student/School Ratio in Some Districts in 1989/90

<table>
<thead>
<tr>
<th>District</th>
<th>No. of School</th>
<th>No. of Student</th>
<th>Teacher-Student ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manang</td>
<td>2</td>
<td>85</td>
<td>1:43</td>
</tr>
<tr>
<td>Dolpa</td>
<td>5</td>
<td>412</td>
<td>1:82</td>
</tr>
<tr>
<td>Mugu</td>
<td>6</td>
<td>261</td>
<td>1:44</td>
</tr>
<tr>
<td>Rolpa</td>
<td>10</td>
<td>1062</td>
<td>1:106</td>
</tr>
<tr>
<td>Soluchumbu</td>
<td>13</td>
<td>1686</td>
<td>1:130</td>
</tr>
<tr>
<td>Rasuwa</td>
<td>6</td>
<td>396</td>
<td>1:66</td>
</tr>
<tr>
<td>Mustang</td>
<td>6</td>
<td>172</td>
<td>1:29</td>
</tr>
<tr>
<td>Mahottari</td>
<td>24</td>
<td>5119</td>
<td>1:213</td>
</tr>
<tr>
<td>Palpa</td>
<td>33</td>
<td>6084</td>
<td>1:184</td>
</tr>
<tr>
<td>Chitwan</td>
<td>50</td>
<td>13666</td>
<td>1:273</td>
</tr>
<tr>
<td>Syangja</td>
<td>57</td>
<td>10365</td>
<td>1:181</td>
</tr>
<tr>
<td>Morang</td>
<td>68</td>
<td>20221</td>
<td>1:297</td>
</tr>
<tr>
<td>Kathmandu</td>
<td>144</td>
<td>30370</td>
<td>1:211</td>
</tr>
</tbody>
</table>

**Quantitative Status of Schools:** In the past years the proliferation of secondary schools has not been at the behest of any policy guidelines. They have grown in
number in response to the expansion of primary schools and under social pressure. The target laid down for primary education is to bring within its network all children in the age bracket of 6-10, but no corresponding target has been set for Secondary education. Assuredly, the National Education System Plan (1971) has announced the goal of admitting 40 per cent of the primary school enrolment to lower secondary schools, and 50 per cent of the lower secondary school enrolment to secondary schools. But this policy has never been acted upon.

In the urban areas and in some districts secondary schools have been permitted to grow in close clusters, without pausing to think whether such a move was defensible or not. This sort of unplanned explosion has given rise to two problems; one, how to improve the quality and two, how to make both ends meet. Establishment of schools in remote districts, where the students are far below then required has caused a drain on the scarce public resources. At present the schools have no legal status. In this context, careful consideration should be given to the need of granting legal status to the lower secondary schools that are currently in operation.

As no attempt has been made to map out the requirements of each area of the country, there are some places where the number of schools is far above the actual need, while in other places their quantity is below par. For instance there are some districts where the school/student ratio averages 40, and there are others where it stands at 200 or more.

**Financial Condition of Schools:** According to the principle laid down under the National Education System Plan. His Majesty's Government bears till now 75 per cent of the salaries of the teachers working in lower secondary schools, and 50 per cent of the secondary schools. At the beginning there was an arrangement under which the government was required to bear 75 per cent of the salaries of the teachers at work in vocational secondary schools. However, in 1981, when they were knocked out of existence, a decision was taken to give 50 per cent salary support all rounds. But, in practice, it has been kept on hold. During the Panchayat, regime revision of the pay-scales of the civil servants was not followed up by the rise in the salaries of teachers; and later, when a decision was made to raise its percentage in proportion to the revised pay-scale, the teachers would refuse to accept them, compelling it to raise its grant to 100 per cent of the revised rate. As a result, the secondary schools receive at present 60 per cent by way of salary support.

The salary support system was a boon for some urban schools and a bane for the schools, operating in the rural areas, where the number of students was such that the receipt from them was not sufficient to meet the pay-roll, even when it was combined with the government grants. Faced with this anomaly, an arrangement was made in the initial years of the Plan under which each school was required to deposit 5 per cent of its income to the District Education Fund. It was designed to help out those schools which did not have the means to pay up the salary of the teachers. However, this scheme was later abandoned.

The present situation is such that rural schools are not in a position to distribute salaries to the teachers and contribute to their Provident Fund. The grant system, as it exists now, is very simplistic and unscientific. New positions are seldom created on top of what exists. The request for additional positions is not viewed with sympathy, even though the school has the capacity to absorb more students, and even though
there is a clamor for admission. In fact, it is not a matter that can be easily decided by the Ministry of Education and Culture, for it does not have a system of annual quota, worked out on the basis of a definite policy.

In some out-of-the-way districts the government provides hardship allowance, besides bearing 100 per cent of the salary amount. In such schools the student strength is so low that it puts a question mark on the propriety of keeping them in operation. A better alternative would be to send students to another district nearby under a scholarship scheme. So far no thought has been given to this matter.

84 per cent of the amount, earmarked for secondary education, is accounted for by the teachers' salary, leaving almost nothing for the improvement of the curricula, teacher training, inspection system, Head Masters' training, physical facilities, and educational materials. A programme was developed to award prizes on the basis of inter-school competition, but the criteria for award, and the number of competing schools was so limited that it could not arouse any enthusiasm in the circle concerned.

In Nepal almost all the schools have owed their genesis to popular participation. To keep up this tradition every school sets up a Management Committee with local lovers of education as its members. Some schools also have land properties. In recent years however, voluntary donation of land as part of the popular participation has not been much in evidence. It must be noted that the cooperation of the Management Committees in constructing school buildings has certainly been highly commendable. But their participation in meeting the operational costs of schools has not been so encouraging.

No matter how it is viewed, the present school subvention system does not give ground for satisfaction. Under this system, it has become very difficult to maintain even a minimum adherence to fiscal rules. If, on the one hand, the schools stand on shaky financial foundations, the Ministry of Education and Culture has not been able to enforce fiscal discipline at the district and school levels, on the other. Now, if in the process of implementing the policy of making education free up to the secondary level, an attempt is made, as in the case of primary education, to make the provision for teachers' salaries and other minor expenses, it would be very hard to predict whether secondary education would measure up to the standard.

When reference is made to secondary education, it is understood to connote general secondary education. The policy of the past years to teach vocational subjects in secondary schools as part of the efforts to produce low-level technical manpower was declared a failure, because of the inability to invest the amount necessary for imparting vocational training. On the other hand, if on the financial grounds alone secondary education is oriented to giving general education only, it will not be of any particular help in the development campaign of the country.

**Curriculum of Secondary Education:** The curriculum, currently in force for the secondary level, does not seem appropriate from several points of view. The National Education System Plan merely proclaimed that its objective was to produce technical manpower by teaching vocational subjects at the secondary level. Again, in 1981, when the curriculum was revised, vocational subjects were considerably scaled down to bear the full mark of 100 only. And its importance was reduced
almost to nothing. Once again, in the past decade the more pertinent vocational subjects were replaced by less important subjects like education and accountancy.

In the existing curriculum there is less scope for the choice of subjects. Although failure in English and mathematics is the chief hurdle, preventing the bulk of the candidates to pass the SLC, no alternative subjects are provided. Besides, as history and geography are optional subjects in secondary schools, the students are found lacking in the knowledge of the history and geography of Nepal.

Optional subjects are selected, not on their merit, but from the stand-point of securing higher marks in the SLC examination. Schools of upper standard insist their students to take up mathematics and science, with hygiene and physical education as the extra optional. Subjects like history and geography are not taught at all. It may be recalled that under the National Education System Plan science was a compulsory subject. It was changed 10 years later into an optional subject on the ground that there were not enough teachers to go around. Recently a decision has been taken to make it once again an obligatory subject.

**Text-books:** Not so long ago the practice was to prescribe foreign text-books, and the non-availability of them was not so uncommon. They are now written indigenously, which, indeed, must be regarded as a change for the better. Nevertheless, many things remain to be done on this front. A good deal of effort has yet to be put in for the production of standard text-books.

Under the present system only one set of text-books is in use, and no particular attempt has so far been made to bring them up to the mark. No step has been taken to create a competitive atmosphere by prescribing different sets for classes 6-9. There has been no effort to remove the existing drawbacks, let alone improving their quality. For these reasons, schools in the private sector have been attracted towards foreign publications.

**Educational Management:** The Regional Education Inspectorate has been delegated the authority to approve secondary schools. But it has not done anything concrete to draw up plans for them, to conduct educational programmes, and to inspect and control them. It has 10/15 specialists for inspection and training. But they have not been active in their fields of competence. The District Education Inspectorate is, in fact, the administrative centre of secondary education. Decisions on all matters of secondary education are taken on the basis of its feedback. However, if, on the one hand, it lies crushed under a heavy burden of work, it is unable to carry out, on the other, the minimum administrative functions.

Similarly, School Management Committee is a pivotal agency for Nepal’s educational prosperity. Until now schools are established on the demand of, or as desired by, the people. But its powers and functions have at times been obscured or misunderstood. In fact, the prevailing situation is such that, apparently, there is no specific administrative unit at the secondary school level. As there is no provision for administrative support from the government, most of the secondary schools are unable to pay out salaries to the teachers in time. Under such circumstances, it is no wonder if they do not appoint the administrative personnel in sufficient numbers. Even well-endowed schools have a skeleton staff to collect fees and to perform other minor jobs, and to guard the school premises and keep them clean. In consequence,
no reliable records of the students are maintained, accounts are marred by irregularities, and statistical data are conspicuous by their absence.

**Teaching Service:** The efficacy of any education system being dependent on the competence and application of the tutorial staff, attempts have been made in the past few decades to make the Leaching profession attractive, convenient and secure in Nepal too. The Eighth Amendment to the Education Rules, 1971, has tried to make it relatively attractive from the career development point of view. Although amenities have been piled up one on top of the other in a steady stream, they have become difficult to avail of in the absence of a specific administrative organization. Notable among them are the want of proper arrangement for maintaining service record, and the problems associated with timely transfers and promotions.

**SLC Examination:** Since the inception of the system of conducting SLC examination in Nepal in 1934, the education system itself has undergone many sea changes. During the intervening period no appreciable changes have been introduced in the examination process except to increase the staff and physical facilities of the Controller of the Examinations Office, commensurate with the growing number of examinees. There have been no changes in the methods of setting question-papers and assessing answers-books. Meanwhile, it has not yet been possible to make adequate arrangements for selecting the examiners and examination centres to cope with the increasing number of examinees. For all these reasons, the management of the SLC examination is riddled with many problems.

One of the most inconvenient features of the SLC examination has been the Lime-lag of 5 to 6 months between the conduct of examination and publication of results. Under the centralized system of today it is next to impossible to bring them out within a month or two. If this is to go on, more than one hundred thousand students will incur a loss of about one year, which is an irreparable loss for any country. Meanwhile, the Controller of Examinations Office has to set the wheels in motions for conducting another examination, as soon as the results of the first have been brought out, leaving no time for addressing the question of improving it. As a result, there has been no desirable reform in the format of question-papers and the assessment of answer-books.

Even though the conduct of examination has been an on-going business since so many decades, no detailed rules and by-laws have yet been formulated. The situation is such that the likelihood for improving the formulation of question-papers, particularly on their confidentiality aspects has receded further away. The same is the case with the assessment of answer-books. It drags on along its old wonted way. To ease the task of setting question-papers, essay-type questions are resorted to with increasing frequency.

**Higher Secondary Education:** Owing to the growth of education and for other reasons, the Higher Education Act, 1989, has been promulgated to provide for higher secondary schools by adding 2 classes to the existing secondary schools (10+2). The rationale of this arrangement may be summarized as follows:

a) The present system under which a student, after passing SLC at the age of 16 moves over to the campus for further study, is not appropriate from the psychological point of view. He should be allowed to receive education in the
old familiar surroundings of his own secondary school.

b) If classes 11 and 12 are added to the secondary schools to accommodate post-SLC students, it would cut down the costs of higher education to the great relief of the guardians.

c) Institution of such education at the present Proficiency. Certificate level campuses will cost more. On the other hand, if classes 11 and 12 are added to the existing secondary schools operational costs will be less, and to teachers who are qualified to teach in those classes it will mean extra rungs in the career ladder.

d) Provision of vocational education in classes 11 and 12 will prove a boon to those who seek to go in for vocational subjects after passing the SLC examination. They will be able to earn their living immediately on completion of Higher Secondary education.

e) Because of its involvement with the Proficiency Certificate level education, the University has not been able to pay as much attention as it should to standardizing higher education. Once the Proficiency Certificate level education is shifted to the schools, it will have more time to devote to the affairs of higher education and to the development of its quality.

f) At present a wide gulf yawns between the courses of study of the SLC and the Proficiency Certificate level, which accounts for the high failure rate at the latter level. The operation of classes 11 and 12 in the higher secondary schools will help remove it, enabling a larger percentage of candidates to get through.

g) Under the present conditions the opportunities of higher education are tilted in favor of the sons and daughters of those who live in urban areas or district headquarters. This imbalance will be wiped out with the installation of classes 11 and 12 in the higher secondary schools, and the students living in villages will also get a chance to receive and orient themselves towards higher education.

3. Outstanding Problems: Secondary education is an important element in the national education system. Today when a movement is on for ensuring primary education for all, and for holding open all the doors of the secondary education for everybody, the only way to make the national education meaningful is to reform it all the way up. In this connection, just and logical answers will have to be found to the following questions:

a) Should the organization of secondary education be left as it is, or changed?

b) How should the obscurities implicit in the current secondary education goals be eliminated, and what action should be taken to make it more practical and job-oriented?

c) What policies and programmes should be adopted, as the process of making secondary education free is put under way?
d) There is no such thing as a lower secondary school in the eyes of law, yet about 4 thousand of them are in existence, operating classes from 1 to 7. Should they be renamed or be allowed to retain the present designation?

e) Should the existing policy of extending salary support be continued, or be replaced by a new one?

f) Public expenditure will shoot up, once secondary education is made free. Should the government bear both the operational and development costs, or should some place be reserved for popular participation?

g) If, instead of imparting only general secondary education, vocational training is also to be provided to the young men and women of secondary school age, who should invest in it, and how?

h) At present, there are two branches of secondary education: Sanskrit and general. What sort of curricula should be evolved to establish harmony between them?

i) Should the present system of non-alternative text-books and monopoly of their production be maintained or amended?

j) Should the current SLC system be improved upon, should a separate autonomous body be created, or should it be regionalized?

k) Should the Higher Secondary Education be put into effect? If so, what arrangements should be made to organize and conduct it?

4. Recommendations:

1. Composition and Goals: While reviewing secondary education in all its ramifications, attention should be focused on the country’s socio-economic, political and educational realities and limitations. And in the process of putting a useful system into effect, schools should be located in such a way that no student is required to walk for more than 2 hours to receive education up to class 8 at least.

2. Secondary education should have three levels: lower secondary (classes 6-8), secondary (classes 9-10), and higher secondary (classes 10+2).

3. The principal goal of secondary education should be to produce citizens who recognize the dignity of labor, who believe in the nation and democracy, who have suitable level of knowledge in Nepali language, mathematics and science, and who bear a good moral character.

4. Secondary education should be the main foundation of the manpower needed for national development. Its another goal should be to produce citizens who are competent in the use of language, who are creative and supportive, who are fully conversant with the national traditions and culture, who have scientific outlook, and who are self-reliant, industrious, and aware of human values.

5. As regards quantitative expansion, the average enrolment in lower secondary schools should be 60 per cent of the boys and girls of the secondary school going
age. 45 per cent in secondary schools and 30 per cent in higher secondary schools. If formal classes alone are not enough to meet this goal, distance education system should also be adopted. Facilities for granting education up to class 12 should be created in all districts within the eighth plan period. If certain places do not justify the establishment of secondary schools, the boys and girls, living there, should be given scholarships and other facilities to induce them to go over to the neighboring districts to receive education.

6. The subjects, given in Table 5 below, are proposed for inclusion in the curriculum of lower secondary schools (classes 6-8).

<table>
<thead>
<tr>
<th>Subject</th>
<th>Class 6</th>
<th>Class 7</th>
<th>Class 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepali</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Sanskrit</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>English</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Mathematics</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Science (+Environmental Ed.)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Social Education</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Hygiene and Physical Ed.</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Optional Language</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Art/Pre-vocational</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>750</strong></td>
<td><strong>750</strong></td>
<td><strong>750</strong></td>
</tr>
</tbody>
</table>

(a) For optional language choice should be made from the mother tongue, national language, English and Sanskrit.

(b) For art/pre-primary vocational subjects, choice should be from among painting, dance, music and handicraft or any of the pre-vocational subjects.

(c) In Sanskrit secondary schools, the optional language should be Sanskrit.

7. For secondary education (classes 9-10) the following subjects are proposed for inclusion as shown in Table 6 below:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Class 9</th>
<th>Class 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepali</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>English</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Mathematics</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Science (+Environmental)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Social Studies</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Optional</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Extra Optional</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>700+100</strong></td>
<td><strong>700+100</strong></td>
</tr>
</tbody>
</table>
(a) Under Nepali Sanskrit should be taught as a supplementary subject.

(b) Optional subject should carry a full marks of 200

(c) One other subject, not included in the optional, may be taken as extra optional.

(d) In the secondary Sanskrit schools it should be obligatory to take Sanskrit as optional with the full marks of 200. Sanskrit or any other subject from among the general group may be taken as extra optional.

(e) Success or failure is immaterial in extra optional. Only the marks above the pass marks should be added to the total.

(f) Subjects offered as optional and extra optional should be determined with reference to the capacity of the schools concerned.

8. The opening of music and drama schools should be encouraged.

9. The following arrangements should be made for the SLC examination:

(a) Under the present circumstances, where one uniform syllabus is in force. all preparations for the examination should be completed at the centre. and the actual conduct of examination, assessment of answer-books, and publication of results should be undertaken at the regional level.

(b) Proper steps should be taken to improve the arrangements reWing to the creation of question-papers, assessment of answer-books 'conduit of examination, and publication of results.

(c) A committee, comprising various experts, should be formed for the above purpose.

(d) The compartmental system should be allowed to continue for some more years.

Higher Secondary Education

10. Higher Secondary Education should be viewed as the first step towards specialization. Its main aim should be to produce middle-level manpower.


12. Special emphasis should be laid on professional and technical education at this level in order to open up job opportunities.

13. His Majesty' Government should make special efforts to open higher secondary schools in remote and rural areas.

14. While setting up higher secondary schools, account should be taken of the number of 'feeder' schools in and around their impact areas. Approval should also be given to well-equipped secondary schools to impart higher secondary
education, if they so desire.

15. The duration of higher secondary education should ordinarily be 2 years.

16. Higher secondary schools should be established by adding classes 11 and 12 to existing secondary schools. However, as the Proficiency Certificate classes of the campuses operated by the universities, or affiliated with them, fall within the purview of the higher secondary schools, the classes, operating in them, may be 1-12, 6-12, 9-12, or 11-12. Although the above configuration may remain in existence for some time, the ultimate aim should be to convert them into institutions with classes from 6 to 12, or 9 to 12.

17. The main syllabus of the higher secondary education should generally be uniform. Syllabi for other subjects should be determined on the basis of the knowledge and skill necessary for the first step of specialization. For this purpose, the current curriculum of the Proficiency Certificate level of the universities should be maintained with the requisite degree or amount of improvement.

18. As the higher secondary education is to be evolved as an inseparable component of school education, its management should be incorporated into the management structure of the high schools. In other words, the board of directors, inspection system, and other rules should conform to those of the secondary schools.

19. The qualification of the teaching staff at this level should, in general, be post-graduate. The system of appointment, transfer and promotion should follow the same pattern as is applicable to secondary school teachers, and arrangements should be made for creating positions on the basis of their qualifications.

20. Since under higher secondary education stress is to be put on the production of quality manpower, the establishment of the schools of that nature should be initiated only after the creation of curricula, text-books, and other appropriate sub-structures.

21. The Higher Secondary Education Council Act, 1989, should be amended to set up a Board of Examination and to make suitable arrangements for policy formulation, development of curricula, and evaluation and monitoring.

22. The role of private sector and popular participation in higher secondary education should be emphasized. Higher secondary schools, operating on this basis, will be of three types. Some of them will be qualified to receive annual grants from the government, others will be given a lump-sum grant, while still others will meet the expenses of classes 11 and 12 from their own resources.

23. The grant and other assistance to be extended to the higher secondary schools should differ on the basis of their nature.

24. While implementing the programme of higher secondary education, the policy to be observed should be to add classes 11 and 12 to the existing secondary schools, to conduct classes 11 and 12 only, and to bring the curricula of the Proficiency
Certificate level campuses within the jurisdiction of the higher secondary education system. Keeping the above in view, the priority order of implementation should be as follows:

(a) Higher secondary classes should be added to fully equipped schools.

(b) Arrangements should be made to add classes 11 and 12 to secondary schools of the remote and hilly areas where there are no campuses at present, and where the enrolment will be at least 40.

(c) Private campuses of the proficiency certificate level, operating in school buildings and having no permanent teachers of their own, and similar constituent campuses of the universities, should be affiliated with the higher secondary education system.

25. The universities should cease to approve the opening of the constituent campuses of the Proficiency Certificate level campuses, or to grant affiliation to similar campuses after 1993/94.

26. Proficiency Certificate level activities, being carried out at present in the private sector, should either be absorbed into the higher secondary education scheme, or upgraded to the graduate level. While doing so, the security of the service of the teachers now at work should be guaranteed.

27. Text-books should be produced and brought into use in conformity with the prescribed curricula. The monopoly on the writing and publication of textbooks should be terminated. It should be privatized, and standard output should be maintained on a competitive basis.

28. The achievement of the candidates should be measured by external examination at the end of classes 11 and 12, and diplomas awarded accordingly. Two year's external examination system, or internal assessment under the semester system should be admissible, depending on the nature of the subject.
4. HIGHER EDUCATION (GENERAL)

1. Background

Higher education arrived in Nepal with the establishment of the Durbar High School in 1853. However, an institution, equipped to teach modern subjects, like Tri chandra College, was established in 1919 only. Although some actions were initiated in 1947 in response to the felt need of having a university of its own, a favorable atmosphere for unlocking L. - door of higher education was created only after the resounding victory of the Revolution of 1950/51. Prior to the establishment of the Tribhuban University, there were 5 government and 16 nongovernmental colleges in the field. Envisaged in 1955, Tribhuban University started teaching in some postgraduate departments at Triputeshwar in 1959. The number of teaching institutes and students, which stood at 25 and 5,000 respectively, jumped to 49 and around 17,000 in 1970 respectively.

Then in 1971 came the National Education System Plan, bringing about organizational, educational and systemic changes. But, as the days of the implementation passed by, numerous difficulties arose in the field of higher education. Tribhuban University was cast in the mold of a highly centralized body at both the academic and administrative levels. To address the issues, emerging from this process, a Royal Higher commission for Education was appointed in 1983, and in 1986 Mahendra Sanskrit University was instituted as part of the implementation of its report. Meanwhile, the pressure of enrolment grew up by leaps and bounds, making it virtually impossible for the Tribhuban University to confine teaching activities to its campuses alone. As a way out, it started the practice of granting permission to open private campuses since as early as 1980. The number of students in the private campuses has been on the increase ever since.

The steady rise in the enrolment of students between 1974/75 and 1979/80 is shown in Table 1, giving details of the students of 10 campuses under Tribhuban University. As the programmes of the Institute of Sanskrit have been taken over by Mahendra Sanskrit University since its establishment, it does not include the number of students of the Institute of Sanskrit since 1977/78. Table 2 shows the annual growth rate of the students at Tribhuvan University.

The corresponding growth in the number of teachers is given in Table 3. The number of teachers at work at the University, which stood at 1,870 in 1974/75, is seen to have soared to 5,788 in 1979/80. Table 4 gives details of the administrative personnel of Tribhuvan University, which do not include the number of teachers and administrators of Mahendra Sanskrit University and private campuses.

The organizational form of the University has gone through many changes. In view of the problems, arising out of centralization, the National Education System Plan had, at the beginning, followed the policy of decentralization. Accordingly, an attempt was made to develop the campuses as 'federated' units, and the University as the 'federal' union of Institutes. This short-lived experiment came to an end in 1979, when the process of centralization staged a comeback. In the ensuing years, the University went through the changes as shown below:
• The institutes of general education were converted into faculties.

• Some of the institutes turned into research centres.

• Some of Non-educational units were re-constituted as directorates. The Jurisdiction of the educational units was narrowed down.

• Administrative units under the central office were multiplied inordinately.

Tribhuban University Act, 1971, has till now been amended 6 times. The changes, made so often in the structural form of the University, have impeded its institutional evolution, and the result of the high degree of centralization has been to prolong the decision-making process. Similarly, the uncalled-for concentration of administrative powers at the central level has adversely affected the quality of performance.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrolment</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974/75</td>
<td>21,459</td>
<td></td>
</tr>
<tr>
<td>1975/76</td>
<td>22,765</td>
<td>6%</td>
</tr>
<tr>
<td>1976/77</td>
<td>21,990</td>
<td>5.33%</td>
</tr>
<tr>
<td>1977/78</td>
<td>25,403</td>
<td>15.52%</td>
</tr>
<tr>
<td>1978/79</td>
<td>31,942</td>
<td>25.74%</td>
</tr>
<tr>
<td>1979/80</td>
<td>39,863</td>
<td>24.79%</td>
</tr>
<tr>
<td>1980/81</td>
<td>34,094</td>
<td>14.47%</td>
</tr>
<tr>
<td>1981/82</td>
<td>51,356</td>
<td>50.63%</td>
</tr>
<tr>
<td>1982/83</td>
<td>52,070</td>
<td>1.39%</td>
</tr>
<tr>
<td>1983/84</td>
<td>48,229</td>
<td>7.39%</td>
</tr>
<tr>
<td>1984/85</td>
<td>55,555</td>
<td>15.19%</td>
</tr>
<tr>
<td>1985/86</td>
<td>54,355</td>
<td>2.14%</td>
</tr>
<tr>
<td>1986/87</td>
<td>61,133</td>
<td>12.46%</td>
</tr>
<tr>
<td>1987/88</td>
<td>65,168</td>
<td>6.60%</td>
</tr>
<tr>
<td>1988/89</td>
<td>74,388</td>
<td>14.14%</td>
</tr>
<tr>
<td>1989/90</td>
<td>79,432</td>
<td>6.78%</td>
</tr>
</tbody>
</table>

Average Growth % 10.55
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>19</td>
<td>21</td>
<td>155</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>57</td>
<td>65</td>
<td>832</td>
</tr>
<tr>
<td>Readers</td>
<td>204</td>
<td>631</td>
<td>1352</td>
</tr>
<tr>
<td>Lecturers</td>
<td>933</td>
<td>1062</td>
<td>1812</td>
</tr>
<tr>
<td>Senior Trainers</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>Trainers</td>
<td>44</td>
<td>53</td>
<td>174</td>
</tr>
<tr>
<td>Deputy Trainers</td>
<td>104</td>
<td>97</td>
<td>189</td>
</tr>
<tr>
<td>Assistant Trainers</td>
<td>980</td>
<td>124</td>
<td>179</td>
</tr>
<tr>
<td>Govt. Educators</td>
<td>169</td>
<td>171</td>
<td>46</td>
</tr>
<tr>
<td>Expatriates</td>
<td>59</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td>Others</td>
<td>61</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,869</td>
<td>2,192</td>
<td>4,862</td>
</tr>
<tr>
<td><strong>Administrative Staff of all categories</strong></td>
<td>1,870</td>
<td>5,788</td>
<td></td>
</tr>
</tbody>
</table>
Table 4
Administrative Staff of the University
1990/91

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Permanent</th>
<th>Temporary</th>
<th>Contract</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Administrator or Equivalent</td>
<td>8</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Associate Professor</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Associate Administrator or Equivalent</td>
<td>17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Reader Equivalent</td>
<td>21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Deputy Administrator or Equivalent</td>
<td>181</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Lecturer Equivalent</td>
<td>18</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Assistant Administrator or Equivalent</td>
<td>579</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Assistant Trainer</td>
<td>206</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>9.</td>
<td>Lab. Assistant or Equivalent</td>
<td>165</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>10.</td>
<td>Head Assistant or Equivalent</td>
<td>868</td>
<td>59</td>
<td>12</td>
</tr>
<tr>
<td>11.</td>
<td>Driver or Equivalent</td>
<td>135</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Typist C or Equivalent</td>
<td>545</td>
<td>74</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>Lab. Boy or Equivalent</td>
<td>533</td>
<td>43</td>
<td>11</td>
</tr>
<tr>
<td>14.</td>
<td>Peon or Equivalent</td>
<td>1781</td>
<td>377</td>
<td>20</td>
</tr>
</tbody>
</table>

Total   | 5076 | 621 | 91 | 5788

2. Present Situation: Education should be able to contribute to the prosperity of the country, development of manpower, economic progress, and transformation and modernization of the society. Its impact should be rated from the viewpoint that it is an investment in human resources. At present there are three factors leading to the rise in the demand for entry into campuses:

1. The inability of the national economy to absorb or employ different levels of manpower, produced by the present educational system, leaving them no choice except to join the campuses;

2. The desire to enhance the educational qualification, hoping that it might add to the chance of landing to some job or the other;

3. the pressure on the limited job-market exerted by applicants who possess qualifications higher than what is required, giving rise to the logic that they stand for no chance at all, unless they themselves can secure higher degrees or diplomas. Higher degree does not necessarily guarantee a job. But, in a tradition-ridden society like ours, it does serve as an insurance policy by paving the ways for greater social dynamism.

True it is the National Education System Plan 1971/75 that brought to the fore the concept of manpower planning in education. But, having to compromise at each step, it collapsed completely in the tempestuous student movement of 1979. At present so high is the demand for entry into campuses and so insistent is the social pressure that it has raised a question-mark on the manpower projection and planning of the past Four Five-Year Plans, because, firstly, such estimations were based on non-realistic demands of the public offices and, secondly, the data recorded in the plan documents, were never verified against the employment situation in the public enterprises or against the positions created by His Majesty's government. If no
coordination is to be worked out between the National Planning Commission, on the one hand, and the Ministries and private sector undertakings, on the other, and if a Human Resources Ministry is not to be created, forecasts of manpower supply and demand will remain a statistical exercise in futility, so far as educational policy and programme, and their implementation are concerned.

Since, under the present situation of rising socio-economic expectations, the beneficiaries of higher education are the upper and middle classes of the urban areas, the social demand for higher education should not be met out of the tax money collected from the general public of a poor country like Nepal. If the goal is to lay the foundations of a just, egalitarian and democratic society, we should follow a cost-efficient policy in the field of higher education. Let those who benefit from the expanding educational opportunities pay the greater part, if not the whole, of the main segments of the operational costs. As a long-term policy, the government should replace the recurring grant by a system of lump-sum allowance. A survey of the sectorial distribution of educational opportunities has shown that the Central Region has the greatest number of campuses, students, teachers, dormitories, and office quarters. Compared with the Eastern Region, the Western Region is slightly better off within regard to hostels and quarters. But from the standpoint of higher education, the Western Development Region and the Far Western Development Region lie far behind others, as shown in Table 5 below.

Table 5
Regional Distribution of Higher Education
(With Reference to Tribhuvan University Campuses Only)

<table>
<thead>
<tr>
<th>Dev. Region</th>
<th>Campus</th>
<th>Total Students</th>
<th>Men</th>
<th>Women</th>
<th>Teacher</th>
<th>Hostel</th>
<th>Emp. Quart.</th>
</tr>
</thead>
<tbody>
<tr>
<td>East.</td>
<td>14</td>
<td>15850</td>
<td>12832</td>
<td>3018</td>
<td>733</td>
<td>752</td>
<td>176</td>
</tr>
<tr>
<td>Cent.</td>
<td>30</td>
<td>56045</td>
<td>41531</td>
<td>14531</td>
<td>3293</td>
<td>2827</td>
<td>353</td>
</tr>
<tr>
<td>Kath. Valley</td>
<td>(-23)</td>
<td>(-46452)</td>
<td>(-33734)</td>
<td>(-12718)</td>
<td>(-2777)</td>
<td>(-167)</td>
<td>(-157)</td>
</tr>
<tr>
<td>West.</td>
<td>13</td>
<td>14816</td>
<td>11690</td>
<td>3126</td>
<td>740</td>
<td>1767</td>
<td>305</td>
</tr>
<tr>
<td>Mid- West.</td>
<td>6</td>
<td>4709</td>
<td>4052</td>
<td>657</td>
<td>152</td>
<td>467</td>
<td>42</td>
</tr>
<tr>
<td>Far West.</td>
<td>2</td>
<td>406</td>
<td>277</td>
<td>29</td>
<td>35</td>
<td>100</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>91826</td>
<td>70480</td>
<td>21344</td>
<td>4953</td>
<td>5913</td>
<td>913</td>
</tr>
</tbody>
</table>

Note: Female enrolment stands at 23.34 per cent.

Source: Enrollment data of 1990/91, Planning Division, Tribhuvan University.

The private campuses, established and affiliated with Tribhuvan University, and numbering 133 till now, are private in the restricted sense of the term. Leaving aside a few, none of them have their own physical resources, nor do they have full-time teachers. They have yet to establish their credibility. Relatively speaking, Tribhuvan University campuses are thought of as being 10 times less costly and having greater number of faculties and facilities. Barring 5 or 6 of them, the private campuses have not yet achieved any educational credibility. Allowed to come into being and function without assessing the propriety of the social demand for higher education, they have yet to be standardized and systematized.

All these matters have percolated down to the root of the apportionment of the national investment in higher education. At present, Nepal spends 2.1 per cent of the Gross Domestic Product (GDP), in education compared with 3.1 per cent on average of the least developed countries and 3.7 per cent on average of the developing
countries. if Nepal's outlay on education is 10.8 per cent of the total public expenditure, the least developed countries spend on average 14.9 per cent, and the developing countries 15.2 per cent. However, the enrolment in higher education in Nepal already amounts to 5 per cent of the age group concerned, whereas it constitutes 2.6 per cent In the least developed countries. Between 1984/85 and 1989/90 government grants for higher education has declined from 34 per cent of the education budget to 21 percent. During the same period, enrolment at Tribhuban University has risen from 55,000 in 1984/85 to 79,000 in 1989/90, of which new enrolment in the Proficiency Certificate level alone was 27,000. Looked at from the angle of the annual growth rate of the student population, propagation of higher education on the basis of government grants alone has become a difficult proposition.

If the policy priorities of the present government are weighed in favor of diffusing higher education on a wider scale, it must brace itself for pumping more money into the educational sector. However, the Approach Paper of the Eighth Five-year Plan, published recently, has this to say on this subject:

The number of universities and other institutes of higher education will be increased in different parts of the country to make room for the admission of a greater number of students. At the same time a policy to encourage the maximum participation of the private and non-governmental organizations will be pursued to bring down the scale of public expenditure in this sector. The National Planning Commission, July 20, 1991.

What it boils down to is that His Majesty's Government is for the expansion of the scope of higher education, if it is not called upon to foot the bill. But this is an issue which can be settled only after deciding how much the government is able or willing to spend. An 'expansionist* policy should be backed up by adequate financial resources.

As of now the general higher education system has two inter-related aspects: relevance and internal efficiency. If the idea is to enlarge the area of higher education by multiplying the institutes of higher learning like the universities and campuses, or by running morning or evening classes in the existing institutions, it cannot be denied that preference will be given to general subjects.

The 9 faculties of Tribhuban University teach about 90 subjects, while the majority of the campuses, operating under them or affiliated to them, concentrate chiefly on subjects like English, Nepali, political science, economics, history and geography. The Faculty of Management does not embrace as many subjects as the term is understood to imply elsewhere. The same is the case of the Faculty of Pedagogy, where, leaving aside the introduction to pedagogy, educational psychology, and elements of pedagogy, very few subjects are taught that deserve the appellation of specialization. Seven languages, music, art, dance, culture and archaeology, and philosophy fall within the ambit of the Faculty of Humanities: while prominent subjects under the Faculty of Social Sciences are economics, political science, geography, psychology and sociology as well as mass communication, population education and social service, which have been added more recently. But the average campuses limit the choice to languages and simpler subjects of the social science.
It is very difficult to judge whether education in such subjects has any relevance to the labour market of Nepal. The Nepalese Workers, of who in only 2 per cent are involved with industrial enterprises are faced with three main problems: illiteracy, poverty and inefficiency. 90 per cent of them are stepped in agriculture. About 80 per cent of them live below the line of absolute poverty. The burning question is how to devise a curriculum for higher education which will cater for this kind of market.

The internal efficiency of higher education is of a more disturbing nature. According to one estimate, 75 per cent at most, and from 50 to 65 per Cent on the least, of the students, enrolled in the campuses of the universities, pass in the third division. When such a huge percentage of students, passing in the third division, is packed up at the Proficiency Certificate level, and that too in the general subjects, there is no reason why the percentage of failures should not be high.

According to the results of the years 1985-1988, the number of students, passing the Proficiency Certificate level of the Faculty of Humanities, did not amount to more than 5 to 20 per cent. In the year 1980/81 the percentage was as low as 4. No reliable study has been mounted on the number of drop-outs, repeater and failures in higher education. The intelligent guess is that 17 to 25 per cent of students drop out at the Proficiency Certificate level, and 30 to 40 per cent at the post-graduate level. If this statistics is translated into cost, it will be apparent that not much attention has been devoted to the cost factor, while investing in the development of the human resources, and that the limited resources at the disposal of the country are being squandered without any hope of recovering them in any form. Any or further investment in higher education should be funneled towards those students who are promising, because only the knowledge and skill imparted to them can bring long-term benefit to the country.

The probable and highly unfortunate outcome of a pro-expansional educational policy will be to over-stretch the faculties, to inflate the administrative staff, and to divert the bulk of the budget to meet the staff expenses, leaving very little fund for class-room activities, laboratories and libraries. Table 4 above and Table 6 below give a clear picture of how Tribhuban University has been overtaken by this phenomenon. Out of the proposed operational budget of Rs. 576,000,000, it has set aside Rs.366,000,000 for the salary, allowance, pension, gratuity and provident fund of the faculties and administration.

The total student enrolment at Tribhuban University soared to 79,432 in 1989/90 from 21,459 in 1973,74. To cope with this explosion of enrolment, it ran morning and evening classes, stretching its human and material resources to the breaking point. Students, just passing out from the university, were recruited as teachers. Over the past few years if it has been liberal in anything to an unnecessary extent, it was in creating higher positions in different faculties.

Higher positions in the faculties like Professors and Associate Professors have been created without reference to any duration, or well-defined role, or programme. For example, there are 7 Professors, and 46 Associate Professors in Nepali, 7 and 26 in economics, 8 and 17 in pedagogy, and 6 and 10 in history. Persons with leadership roles at the university have never been able to justify it. Even if the functions of a Professor, or Associate Professor, or Reader are not so different, it can still be argued that the process of creating positions is not scientific at any stage. If their
number is to be a ratio of the total teachers of a particular subject, or if it is to be
determined by the teaching experience of the teachers, in total disregard of their
competence in any particular field, or the special nature and internal structure of any
particular programme, the policy of creating positions like Professor and Associate
Professor with no scope for utilizing them to the full, is something which cannot
hold out for long. Nepal, a country with the per capita Income of US$ 170, can by no
means afford to run such a higher education programme, depending entirely on the
government grants. Moreover, the programme has neither any relevance to
productive activities of the society or the requirements of the labour market, nor does
it have any competence.

While discussing the autonomy of the university, it should be constantly borne in
mind that it has two aspects: internal and external. The university should be
competent enough to decide on the internal administration of the university, financial
activities, appointment of teachers, enrolment of students, and fixation of tuition fees
and similar other matters. But higher education, being an important means of
producing the skilled manpower so necessary for the nation, is a matter for which the
university is responsible to the nation and its citizens. And there are certain national
values and interests (such as national unity and territorial integrity, and constitutional
values and norms) which no university can afford to contravene.

Besides, there are matters like the development of higher education, and the
coordination between the national context and the university activities for which the
university teachers, students and administration may have to liaise with different
governmental agencies. If the university is to be autonomous in both theory and
practice, it will have to build up competence in some respects, such as finance,
administration, and appointment of officials like Chancellor, Vice-chancellor,
Registrar, Rector and Chairman of the University Service Commission. On the
economic side are such things like the clarity of the policy which governs the action
of the University Grants Commission, the role and competence of the university in
the mobilization of financial resources, and the full control of the university over the
financial administration of the university. Full autonomy becomes possible, only
when it builds up its own independent financial viability.

In a developing country like ours government grants for higher education are
unavoidable. But such a grant alone does not imply the absence of autonomy. What
is essential is that every university and college under it should have independence of
action in chalking out programmes to suit the needs of the students and teachers, in
enrolling students, and in appointing teachers. Autonomy like this helps raise the
standard of teaching on a competitive basis. It also fosters a spirit of competition
among the universities and the colleges under them in the task of mobilizing
economic resources.

For FY 1991/92 the expenditure of Tribhuban University has been estimated at Rs.
1,028,469,500, of which Rs. 527,322,000 will be borne out of internal resources, and
Rs. 501,146,500 will be accounted for by foreign assistance. The internal resources
consist of Rs. 49,000,000, being the income of the university, and Rs. 478,322,000.
The estimated grant from His Majesty's Government, as summarized in Table 6
below.

Table 6
## Estimated Income & Expenditure of Tribhuban University (1991/92)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Technical Institutes</td>
<td>181501</td>
<td>273396</td>
<td>680180</td>
<td>66.2</td>
</tr>
<tr>
<td>2. Sc.&amp; Tech, Institutes</td>
<td>36160</td>
<td>50460</td>
<td>58095</td>
<td>5.7</td>
</tr>
<tr>
<td>3. Vocational campuses</td>
<td>46945</td>
<td>62662</td>
<td>78263</td>
<td>7.6</td>
</tr>
<tr>
<td>4. Humanity &amp; Social Sc. Campuses</td>
<td>60212</td>
<td>78869</td>
<td>83330</td>
<td>8.1</td>
</tr>
<tr>
<td>5. Central Teaching Institutes</td>
<td>31122</td>
<td>38235</td>
<td>47570*</td>
<td>4.6</td>
</tr>
<tr>
<td>6. Research Centres</td>
<td>9915</td>
<td>14335</td>
<td>13741**</td>
<td>1.3</td>
</tr>
<tr>
<td>7. C. Office &amp; N.D.S.</td>
<td>37539</td>
<td>48532</td>
<td>61090</td>
<td>5.9</td>
</tr>
<tr>
<td>8. Additional Programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>403394</td>
<td>566489</td>
<td>1028469</td>
<td>100</td>
</tr>
</tbody>
</table>

### Source of Income

1. **HMG Grants**
   - a. Regular: 276990
   - b. Additional Grants for HMG specified Programmes: 4000
   - c. Additional Programmes: 6200
   - d. Investment in Foreign Aid programmes: 14897

2. **Foreign Aid**
   - 65933

3. **University Income**
   - a. Regular: 27168
   - b. Teaching Hospital: 15350

4. **Saving deposited with general reserve fund(-)**
   - 944

**Total**

403394 566489 1029469 100
* Expenditure for 23 Central Departments in the area of general higher education-2 in the Management Faculty, 6 in pedagogy, and 15 in the Humanities -- is estimated at Rs.19,467,000 only.

** Expenditure for Research Centres (except RECAST ) is ‘estimated at Rs. 9,464,000, while the expenditure for general higher education is estimated at Rs. 190,524,000 only for FY 1991/92.

The National Education System Plan initiated the process of implementing the teaching programme throughout the country with the help of campuses, functioning under various institutes of Tribhuban University. Some of them undertook research activities also. Later, the form of the institutes was altered, and the Institutes of Humanities and Social Sciences, and Law and Management were converted into the respective Faculties of the University. At one stage Science was brought under the wings of a Faculty, and was detailed later on to be included in the Institute of Science and Technology.

As will be clear from Table I, the number of those, wishing to enter the Proficiency Certificate level has been on the increase every year. According to the enrolment statistics of Tribhuban University for the year 1989/90, the total number of students at the Proficiency Certificate level was 48,244, as shown in Table 7, or 60.73 per cent of total enrolment. The new entrants Tribhuban University and private campuses for the same year were 40,220. or 30 per cent of the enrolment at the secondary level, or 67.2 per cent of the total university population. In the same year the number admitted to the graduate level was 24,186. and at the postgraduate level 6,009, or 30.44 per cent and 7.56 per cent respectively of the total enrolment.

As higher technical education and teacher training are analyzed in detail in other Chapters of this Report, the present Chapter has been confined to some topics connected with the general area of higher education. In this context it would not be out of place to discuss some of the problems associated with the Humanities and Social Sciences, besides Management and Law.

**Management:** The Faculty of Management under the University conducts the teaching of various courses of management, prepares the curricula, and launches research programmes. Management education has always played a significant role in producing skilled management manpower necessary for the country. Table 1 above illustrates the course of evolution of management education. It ranks next to the Humanities and Social Sciences as the faculty which attracts the biggest student population. According to the data published by Tribhuban University, in the semester of 1980/90 the number of students, taking up management course, were 18,343--10,851 at the Proficiency Certificate level, 5,916 at the graduate level, and 1,586 at the post-graduate level. In the same year, the cost per student for management education was computed at Rs.1.128.

**Law:** A new life should be breathed into law education as part of the effort to ensure the proper development of democratic values and norms and to firm up the rule of law. At present law education is in a state of confusion. For any student passing the SLC examination the portals of law education at the Proficiency Certificate level, and subsequently to graduate level, are open. Since no postgraduate courses are
available, the standard of law education has not measured up to the desired extent. Its curriculum has lagged far behind from the theoretical, professional and practical points of view. Although it is a prey to most of the problems, besetting the general higher education, it has some difficulties of its own as a professional subject which deserve notice in the present context.

Of course, the Faculty of Law has been contributing to the production of lawyers, as will be seen from the fact that in the year 1989/90 there were 5,778 law students -- 3,855 at the Proficiency level, and 1,923 at the graduate level. True it is that by conducting law classes at the Proficiency Certificate level that the volume of manpower in the field of law has increased over the past years. However, persons entering the arena with the law education of the Proficiency Certificate level have displayed lamentable lack of maturity, and their skill, experience and efficiency have also left mulch to be desired, pointing to the desirability of removing law education from the Proficiency Certificate level. After conducting courses at the graduate and post-graduate levels, research works at the doctoral level should be taken in hand. It would be more convenient to start research works under the Faculty of Law.

Table 7
Tribhuban University Enrolment (1989/90)

<table>
<thead>
<tr>
<th>Institution/ Faculty</th>
<th>Lower</th>
<th>Proficiency</th>
<th>Graduate</th>
<th>Post Graduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>115</td>
<td>1,523</td>
<td>308</td>
<td></td>
<td>1,831</td>
</tr>
<tr>
<td>Medicine</td>
<td>300</td>
<td>941</td>
<td>246</td>
<td>25</td>
<td>1,521</td>
</tr>
<tr>
<td>Agriculture</td>
<td>576</td>
<td>80</td>
<td>662</td>
<td></td>
<td>1,318</td>
</tr>
<tr>
<td>Forestry</td>
<td></td>
<td>460</td>
<td>117</td>
<td></td>
<td>577</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td></td>
<td>5,797</td>
<td>2,703</td>
<td>884</td>
<td>9,384</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>117</td>
<td>2,779</td>
<td>3,019</td>
<td>357</td>
<td>6,272</td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td>3,855</td>
<td>1,923</td>
<td></td>
<td>5,778</td>
</tr>
<tr>
<td>Management</td>
<td>10,851</td>
<td>5,906</td>
<td>1,586</td>
<td></td>
<td>18,343</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>21,958</td>
<td>9,302</td>
<td>3,157</td>
<td></td>
<td>34,417</td>
</tr>
<tr>
<td>Total</td>
<td>1108</td>
<td>48244</td>
<td>24186</td>
<td>6009</td>
<td>79441</td>
</tr>
</tbody>
</table>
Table 8

Private Campus Enrolment (1988/89)

<table>
<thead>
<tr>
<th>Institute/Faculty</th>
<th>Proficiency Level</th>
<th>Graduate Level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>10,127</td>
<td>605</td>
<td>10,732</td>
</tr>
<tr>
<td>Management</td>
<td>7,967</td>
<td>1,381</td>
<td>9,748</td>
</tr>
<tr>
<td>Science</td>
<td>859</td>
<td></td>
<td>859</td>
</tr>
<tr>
<td>Law</td>
<td>1,331</td>
<td>159</td>
<td>1,489</td>
</tr>
<tr>
<td>Medicine</td>
<td>28</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>20,312</td>
<td>2,545</td>
<td>22,856</td>
</tr>
</tbody>
</table>

3. Main Problems: According to the World Bank's Social Sector Strategy Review (1989), student enrolment in higher education in Nepal is estimated to reach 200,000 by the year 2000 A.D. For a least developed country the enrolment of 5 per cent of the age group is quite unexpected, because, compared with the primary and secondary level enrolments and the literacy rates in other least developed countries, Nepal's position lies below average. (The World Bank, 1989:15-7). During the past 15 years the annual growth rate of students in higher education has averaged 10 percent. At the present growth rate of 10 per cent per year the 5 per cent of the age group will rise to 11-12 per cent by the year 2000 A.D. According to the Planning Division of Tribhuban University, if the annual growth rate is assumed to be 7 per cent, the number of student enrolment in higher education will reach 242,000 by the year 2000, and if the growth rate is assumed to be 9 per cent, the number will be 296,000.

After the establishment of Mahendra Sanskrit University in 1986, as recommended by the Royal Commission for Higher Education of 1983, the concept of one nation one university has been finally laid to rest. According to the enrolment figures of Tribhuban University for the year 1988/89, the number of students in the campuses under it totaled 79,432- 15,622 in the technical campuses and 64,810 in general campuses (Table 7). Tribhuban University itself has now jettisoned the old concept of a teaching university, and has reconciled itself to the idea of affiliating private campuses and functioning as an external examining body for them. The country has now 133 private campuses with the student population of 22,856 at the Proficiency Certificate level, and 20,312 at the graduate level in 1988/89 (Table 8).

Since the past three decades, owing to mounting social and political pressure, Tribhuban University has been running classes in four shifts—morning, day, evening and night—to cope with the number of students seeking admission. Equipped to take in from 18,000 to 20,000 students at the Proficiency Certificate level, it was required to find room for 36,000 this year, according to the available information. What kind of impact such a policy will have on the investment and management of the university is anybody's guess. One thing is, however, quite certain that both the university and nation have realized that it has been a tremendous loss in terms of the quality of the product. Anyone who tries to chew more than he can swallow runs the risk of being choked to death, and that exactly is the situation in which Tribhuban University has found itself since about a decade. As a result, its entire structure has been shaken to its foundations.
For the all-round development of a man physical growth is no less important than intellectual and mental progress. Yet, strangely enough, the campuses have not much open space and very few equipment for sports and other athletic activities. They have no provision for counseling the students on non-academic issues. They rarely organize and stage cultural programmes, designed to stimulate the students’ interest in singing, playing musical instruments, dancing, composing and reciting poems, and acting. Such activities provide the students with the chance of realizing the fullness of their personalities, and acquainting themselves with, and respecting, the cultural traditions of one another in a spirit of give and take. At present such programmes form part of neither intra-curricular nor extracurricular activities.

Of course, inter-campus and inter-departmental debates, quiz contests, and essay competitions are held from time to time, but their frequency is almost negligible. In this connection, it may be pointed out that the campuses stand in great need of students’ clubs, not students’ unions. They can be instrumental in bringing out house magazines, and in staging debates, quiz contests, essay competitions, and other creative activities of strictly non-political nature. The university campuses have so far betrayed a singular apathy towards them.

Campuses should have hostels, and they should be evolved more in the form of centres for student activities than as a mere convenience for eating and sleeping. Hostels for girl students are almost non-existent. The hostel arrangement in the whole of the Kingdom has the capacity to accommodate 5,913 students of both sexes. Only about .6 per cent students on average is covered by the residential education.

Teachers: Teachers are the hinge-pins of any educational system. Still, the teaching profession, particularly in the category of higher education, has not been able to attract able and efficient persons on a wider scale. The factors responsible for this state of affairs are the low pay scale the low priority assigned to higher education, and the fear of social indifference. The talented teachers of the university have made their name by engaging themselves in activities that have nothing to do with the university. Teachers who have made their mark through teaching and research within the four walls of the university are few and far between.

Flawed examination system and the obligation to recruit teachers under duress, the fitness test being just a formality, an act of going through the motions, have combined to saddle the university with teachers who have the requisite degrees, but who have no teaching capacity to match them; or who are well-grounded in the subject, but whose teaching method is out-modeled. This situation has had a deleterious effect on the higher education in science, in particular.

Most of the teachers have been unable to update their knowledge for three reasons. Firstly, no regular arrangement has been made to organize special courses
of training, seminars, etc.; secondly, no facilities or incentives have been provide: for higher study; and thirdly, most, or all, of them are obliged to take up an outside job to keep the wolf from the door. The spirit of indifference, revolt and frustration, hanging over them, has left its mark on every aspect of education.

For want of opportunities for special training and study, they are debarred from the knowledge and experience of the academic atmosphere of the contemporary world. No suitable environment for learning and research has been built up in the field of higher education. One overwhelming reason for the absence of standard curricula, the emergence of makeshift teaching technique, and the non-availability of proper amenities for education is the lack of academic leadership.

Certain other factors have also been in operation to pollute the academic atmosphere, surrounding the persons who are engaged in the teaching profession at the higher education level. They are as follows:

1) The process of recruitment has been centralized, with the result that the educational institutes are forced to look to the centre for the supply of requisite manpower, or for permission to fill up vacancies. As selection for recruitment is not guided by proper criteria, suitable candidates are generally left out in the cold.

2) There have been cases where teachers, who are not even graduates, were promoted to special positions; or where persons, not having the requisite qualifications, were asked to take post-graduate classes and even assume departmental leadership.

3) No facilities or scholarships have been extended to specially qualified teachers to go in for Ph.D. or M.Phil., or to conduct studies and research in their fields of competence. Highly skilled and trained manpower has been compelled to confine themselves within the four walls of the university, because they have no scope for displaying their special gifts, other than one or two institutes of Tribhuban University.

4) Some of the competent teachers are found to have engaged themselves in projects or other activities outside Tribhuban University in place of, or in combination with, the normal teaching duties. Others have taken personal advantage of the projects and facilities, assigned to them in their capacity as teachers of Tribhuban University. Still others have deliberately neglected class works in order to reap benefit from private tuitions or coaching classes. The tendency to teach in as many shifts of as many campuses as possible is a rule rather than an exception.

5) The talents of the teachers, engaged in research centres, have not been utilized to the full. Some of them have been enjoying special facilities, and are making money hand over fist. They have also taken up personal research works that have nothing to do with the centre's programme. The work going on in the research centres, have yielded no particular benefit to the university. There have been no academic exchanges between the research workers and university teachers. Persons of proven merit in the research and other fields of education have not been utilized in the teaching profession.
6) The remunerations payable to teachers and research workers of the same level are not uniform. They vary from institute to institute. For example, there is a wide divergence in the ion-practising allowance of the Teaching Hospital, project allowance of the research centres, and the educational facilities of the teachers.

7) There are persons who, university teachers though they are, have not set foot within the university precincts for tens of years, and have been enjoying the usual facilities all the same. They do not perform their jobs, even when they put in their appearance.

8) Although the accepted principle is that teachers in M.Sc., M.A., M.Com, B.Ed. and B.L. classes should have qualifications of at least one higher level, such has not been the case with Tribhuban University. That is not all. In B.Ed. and B.L. graduates are taken in as Readers on the ground that they are professional courses.

9) The hierarchical roles, functions and duties have not been chalked out in a cut fashion.

Curriculum: Until now the tradition of devising and improving curricula with a scientific approach and as an institutionalized and continuous process has not been evolved. Such attempts, as there are, are sporadic and partial. The activities of the Curriculum Development Centre are limited to Nepali, introduction to Nepal, English and population education - the four compulsory subjects.

Curriculum is a self-contained process. It starts with the spirit immanent in the aims and objectives of education, and ends up with the evaluation. However, it has never been viewed in that light, with the result that the teaching at the Tribhuban University faces one way, and evaluation the other-- a classic case of the right hand not knowing what the left hand is doing. Teaching and examination do not, as they should, form part of the same process. They do not function as the links of one unbroken chain.

This situation has been brought about by the uncalled-for changes in the internal structure of the University. For example, the sudden change-over from the semester system to the annual system has not been paralleled by the corresponding adjustment in the curricula. What is incomprehensible is that no unit has been entrusted with the task of examining and reviewing the curricula of the University. Although the Rector is supposed to be the chief officer, so far as education is concerned, there is no mechanism to keep him abreast of the actual state of affairs. The Curriculum Development Centre, Education Councils, Subject Committees and Teaching Committees have not been able to assert their roles in an institutionalized form.

What curricula there are, are old and out-modeled. Although several attempts have been made to improve them, they were foredoomed to failure because they lacked any concrete basis. They amounted to nothing more than the re-distillation of old ingredients. The matters, taught under different subjects in higher education, are of low quality, compared to the SAARC countries, not to speak of the international standards. Although attempts have occasionally been made to update the curricula, they have not met with any success for want of concrete criteria. They also lacked a
definite policy making the whole exercise a private project, either individual or collective. What should have been done was, first, to assess the curricula drawn up so far, before thinking up any reform measures. However, no curricula have been subjected to scrutiny to the required extent, and there is no provision for including the facts brought to light by the research centres of Tribhuban University, and other institutions.

**Text-books:** All the text-books and other reading materials, required for higher education, have not yet been produced in the country, leaving no alternative except to import most of them from outside. As a rule, curricula of various subjects are devised with an eye on the appropriate text-books that are locally produced. In the case of Nepal, however, there is an overall shortage of text-books which provide an objective and standard exposition of the subject-matter in conformity with the goals of higher education and the spirit inherent in them.

Although the Curriculum Development Centre has been given the responsibility for bringing out text-books and reference books, it has its own problems. The book-printing process is highly constricted. No institution is wholly responsible for it. Tribhuban University has a printing plant of its own, but it has not been very effective in its operation. The amount, set aside for the publication of text-books, is very meager. As a result, the number of books, published by the Curriculum Development Centre, has come down, instead of going up. Earlier publications are not in the market. Their revisions and re-prints are rare, and the sale of published books is not well organized.

**Teaching:** The teaching at Tribhuban University cannot be described as satisfactory. Its only aim seems to turn students into parrots. Because of overcrowded classrooms, the methods, more often resorted to, are lectures and note-takings, with no attempt at developing the thoughts and creativity of the students. As the whole process is dull and monotonous, it has not been able to rouse their interest. Teachers, specially new teachers, have no chance to get any sort of re-orientation training or develop their skills. The Curriculum Development Centre has tried to do something in this direction, but the resources at its disposal are very limited.

Most of the teachers at Tribhuban University are its own products. In the absence of any kind of re-orientation, the status quo has become the rule of the day, causing a sharp decline in the standard of teaching. In most of the campuses attendance of the students is not recorded, resulting in such a high rate of truancy that on average they attend classes for 80 or 90 days only in the whole year. The University has no definite schedule to regulate its activities from the enrolment to the final examination. It has no yard-stick to measure how many days of study should be devoted to which subject, and for how many hours the classes should run each day.

**Evaluation:** The evaluation process, which is examination-centred, has become administration-oriented, instead of being education-oriented. Functions like the setting up of questions have been viewed from the administrative angle. The harmony that should exist between the class-room teaching, and the curricula and the spirit implicit in them, on the one hand, and the examination, on the other, is conspicuous by its absence.

Although some guide-lines have been drawn up for the assessment of answer-books,
each examiner appears to have his own basis for awarding marks. Study or research on the realities of the examination system is almost non-existent. Obviously, there is a crying need for mounting such a study. This and this alone, can lead to the qualitative enhancement of higher education, because till now our education is examination-centred, and the likelihood of an overnight change in this outlook is quite remote.

**Research:** Research works at Tribhuvan University are conducted under the faculties and at the research centres. When talking of the areas of research the matters, deserving attention are policies, programmes, and problems at the management level. Viewed at the policy level, it becomes apparent that no coordination in the practical form and to the desired extent has been established between the research centres within and outside the Tribhuvan University. For this reason, the intermediary role of the research centres in bringing together education and research as the complementary of each other has not been as fruitful as it should. Due to the lack of proper coordination between them, they have not been able to associate themselves with the research programmes devised by the Ministries, Departments and other agencies of His Majesty's Government to the required extent. The formal process of securing the concurrence of the Ministries and other agencies of His Majesty's Government with the research proposals in connection with the projects to be funded by foreign donor countries and international organizations has been found to be very circuitous and time-consuming.

Looked at from the viewpoint of programme, the opportunities for acquiring knowledge and skills in new research technologies are not available to the researchers, belonging to the Faculties and research centres of Tribhuvan University. The channels, available for the exchange of research-findings, data and documents, are not adequate. It has not been possible to make available to the University teachers, living outside the Kathmandu Valley, adequate opportunities to join the research centres and carry out research works. Also, it has been found that the Central Departments and Research Centres have not been providing class works on research techniques and guidance, so essential to doctoral programmes, in the proper form and to the required extent. As a result, although about 310 persons have registered themselves for Ph.D. oriented research over the past 31 years, only 58 of them were able to secure the degree.

From the management point of view, the amount set aside for research at Tribhuvan University is quite inadequate. At present, it constitutes about 13 per cent of the total annual budget. As for the Central Departments, they have money neither for research nor for publication. Such is the shortfall of the budget that it has not been possible to provide even the minimum of necessary equipment. The budgetary constraint is so severe that it allows no scope whatsoever for enhancing the efficiency of the Research Centres. For lack of even elementary facilities, the participation of the teachers, working under the Central Departments of Tribhuvan University and elsewhere, has not been that encouraging. Similarly, research by contract and consultancy services appear to lack energy and dynamism.

**National Development Service:** The National Development Service has its uses, because it sounds a note of pragmatism in a curriculum which has an overdose of theories. It provides the students with a chance to correlate the situation of the nation or society with the knowledge they have acquired. It also provides the basis for
bringing the related curriculum in line with the realities prevailing in the country, and making it responsive to the needs of the community. However, the National Development Service has its own problems. The sad thing is that its duration has been brought down from 12 months to 3 months, to the detriment of the students concerned. It also jacks a clear-cut national policy, leading to a situation where His Majesty's Government and the University may have difference of opinion. This programme, which entails the provision of allowances for five thousand students, studying at the post-graduate level, obliges the nation to shoulder a heavy financial burden.

Management: Enrolment of students in higher education has been steadily increasing. At the same time, the University has been experiencing the need to introduce new subjects and explore new areas of learning. Increment of physical facilities has not been able to keep pace with the sharp increase in the number of students. Facilities in the campuses have remained as they were. They were left with no choice except to run classes in four shifts - morning, afternoon, evening and night in order to cope with the problem of making room for the ever-increasing number of students.

The gradual expansion of the size and educational programmes of the University has added to the complexity of the management aspect. At this point of time, certain problems, appearing in the University management, have called for urgent attention. Problems like the shortage of financial resources, tardy performance, administrative red tape, paucity in the use and mobilization of other resources, constant enlargement of the bureaucracy, absence of educational schedule, and mounting external impact have stood out in bold relief. An attempt is being made here to present these problems of management in brief.

It has now become quite apparent that the fundamental problem, facing the management of higher education is the centralization of authority. Obliged to bear a heavy work load and bogged down by administrative details rather than by policy matters the officials at the centre are left with no time to discharge the responsibilities of their respective offices, and there is a growing tendency among them to pass the buck. Other management problems of the University vary in nature. As there is no clear definition of the rights and responsibilities, the performance and the system of evaluating it has not become effective. The system of coordination, planning and control has not evolved in the right direction. There is no coordination between educational programme and economic planning. The teachers have not been associated with the formulation of educational policies to the desired extent. Creation of unnecessary administrative units has only added to the administrative cost. The inter-relationship among the campuses is almost negligible. Looked at from the management point of view, the University of today appears to be standing at the cross-words, not knowing which way to go.

The implementation side of the University 'doth the same tale repeat. Control, planning, coordination and evaluation mechanisms, which have a vital bearing on the enhancement of educational quality, and elimination of unproductive expenses, have not been as effective as they should. In the field of personnel administration, too, there are numerous difficulties. The steady increase in the number of teachers and bureaucrats is a case in point. It has had the effect of worsening the already bad situation.
Appointment of teachers at the campus level does not have any scientific basis. The selection process provides no guarantee that the best among the lot would be picked up. Even now about 30 per cent of the teachers are working on daily wages and short-term contracts, and as temporary recruits. If this situation is allowed to continue for long, it will clog the development of higher education. Positions are created, not on the basis of a careful analysis of the work load, but haphazardly. Pursuit of policies like time-bound promotion and automatic assimilation into the regular cadre in the interest of cheap popularity or under political compulsions and pressures has badly affected the educational standards and tarnished the image of the teachers. It has also lowered their morale and killed their initiative.

**The Concept of 'Multiversity':** While giving thought to the question of setting up new universities in different parts of the country, His Majesty’s Government would do well to pay special attention to the need for developing physical, economic and educational infrastructures in both the public and private sectors.

Before deciding on the site of a new university, several questions will have to be answered. Does the proposed area have a sufficient number of secondary schools? Is the number of students, passing out each year adequate to feed the proposed university? For this purpose, the best way to go about will be to make a detailed educational survey of the zones and districts falling within the ‘catchment area’ of the proposed university. In particular, the trend and direction of the past 20 years and the forecast for up to the year 2000 should be taken as the basis for decision, because the most important thing is the continuity of the institution.

Another important factor is the socio-economic profile of the districts and zones, lying within the parameter of the proposed site, such as population, social structure, economic and industrial affluence, and their inherent attributes like drinking water, power, road communication, health facilities, banks, regional, zonal and district offices, and other development projects and activities. Thirdly, the number of campuses, teachers and students, in particular, the performance, experience and professional background of the teachers, have an equally important bearing on the selection of the site. The fourth determining factor is the present quantum and future growth of popular participation in the form of grants and scholarships. However, a university being, by its very nature, a costly proposition, it cannot be assumed that the amount of popular participation which is deemed sufficient for today will continue to be so in the long-term perspective.

In the context of the universities-to-come detailed considerations should be focused on three things—site, structure and investment. The first thing that should be borne in mind is that they should not be too many. We should learn the lessons from our history, and every precaution should be taken to see that history does not repeat itself. Sixty seven per cent of the students is now studying at the Proficiency Certificate level, but nowhere in the world are they accepted as university students.

Another thing is that student enrolment is marked by heavy imbalance. The enrolment of 44 per cent in the humanities, 23 per cent in the management, and 7 per cent in law helps give Tribhuban University the look of a non-technical arts university. By any standards, it has become a 'megaversity', scattered over a wide geographic area.
In the decades to come, the labour market is going to be very constricted for the non-technical graduates, because their production is far out-stripping the growth rate of our economy and productive sectors. Even now there are so many technical graduates who are out of work. Under such circumstances, the less we talk about the non-technical graduates the better. Nevertheless, as shown in Table 9 below, the Nepali tax-payers continue to invest their scarce resource in higher education, in spite of the fact that only 25-30 percent of the amount invested has borne fruit, and that the greater part of it has produced nothing.

Table 9  
Investment in Higher Education Per Student Per Year

<table>
<thead>
<tr>
<th>Tribhuvan University, General Education. 1989/90</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>Rs. 1,690</td>
</tr>
<tr>
<td>Law</td>
<td>Rs. 1,088</td>
</tr>
<tr>
<td>Management</td>
<td>Rs. 1,128</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>Rs. 2,983</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tribhuvan University, Technical Education. 1989/90</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>Rs. 52,296</td>
</tr>
<tr>
<td>Agriculture and Animal Science</td>
<td>Rs. 34,701</td>
</tr>
<tr>
<td>Forestry</td>
<td>Rs. 28,258</td>
</tr>
<tr>
<td>Engineering</td>
<td>Rs. 18,791</td>
</tr>
<tr>
<td>Science and technology</td>
<td>Rs. 5,261</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mahendra Sanskrit University, 1989/90</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All levels in all subjects</td>
<td>Rs. 20,868</td>
</tr>
</tbody>
</table>

Note: In FY 1989/90 the average expenditure of Tribhuvan University per student per year was Rs. 4,060.80, and Rs.5,029 per post-graduate student. The Table takes into account the operational cost only, not the capital expenses. Investment per student was arrived at by dividing the estimated operational cost by the number of students. In the case of Mahendra Sanskrit University also the cost per student was extracted by the application of the same formula.

The government should not provide higher education with a grant amounting to more than 25 or 30 per cent of the total education budget, by ignoring the equally valid claims of basic and primary education, because it yields less social and economic benefits at a greater cost to the exchequer.

The establishment of a new university should not be justified on the ground that the local pressure is ‘irrepressible or irresistible’, or that funding from some source is easily available. Any attempts at setting it up on religious, cultural, political, or commercial grounds should be discouraged. As far as possible, any new university should be a teaching, residential body. It should not be a registration and examination centre. It must be well-organized and well-connected. It should not be an over-stretched organism like Tribhuvan University, bringing in its train all kinds of management problems. It should be equipped with its own workshops, laboratories and teaching complexes including libraries.

If a new university is to learn from the past mistakes of Tribhuvan University and Mahendra Sanskrit University, it should not depend on government subventions.
alone. Rather. It should be self-reliant in terms of money. It should place more emphasis on vocational and technical subjects than on general subjects. It should not be content with the languages, humanities and social sciences, no matter whether they are fundamental social sciences like economics and sociology.

Like the campuses of Tribhuvan University, it should not confine its activities to teaching Nepali, English, civics, economics, history and the like. A higher body like the University Grants Commission should spell out which university should specialize in which subjects so that all the universities of Nepal may not be forced to run classes in the same subjects like mathematics, statistics and anthropology in the same way.

A University Grants Commission should be set up to define the roles of, and set the standards for, the present and prospective universities of Nepal, and to determine the grants to be made available to each of them, keeping in view the national goals and policies of higher education. The Commission will be required to chalk out a long-term master plan for the development of higher education bearing in mind the following:

(a) The proposed growth rate of higher education;
(b) The inter-faculty distribution of enrolment;
(c) The need and availability of the means;
(d) Physical facilities;
(e) Student-teacher cost ratio;
(f) The proportion of the operational cost:
(g) The educational-administrative cost allocation ratio, and he research-teaching cost allocation ratio;
(h) Regional and social distribution of the opportunities for higher education:
(i) The quality and comparability of the programmes; and.
(j) The relevance of the present and proposed programmes to the socioeconomic needs of the nation.

4. Recommendations: These recommendations on higher education (general) have been drawn up with an eye on several aspects of the present situation, specially the economic undertones. The present proportion of 10 per cent growth rate and 5 per cent enrolment rate is expected to hold out for some time. Any attempt to halt or reverse it forthwith may not be politically palatable. However, it should be borne in mind that the increasing commitment of His Majesty's Government to basic, primary and secondary education may involve cuts in the outlay on higher education.

To immediately divert the students, passing the SLC examination each year, to higher secondary schools (ten plus two), or to the proposed vocational and technical institutes, or to polytechnic institutes, is also going to be a costly affair. For all these
reasons, the present system of full government grant should be abandoned in favour of the private ownership of higher education.

(1) University Grants Commission: An agency like the University Grants Commission should be established in Nepal to define the role and function of the proposed higher education institution, specially the university education, in the light of the social demand and the state of the economy. It will handle the government grants for higher education, and maintain the standards and uniformity of higher education. Its composition and terms of reference are given in the Appendix to this Chapter.

(2) The first step in the direction of making opportunities for higher education available to all competent and talented persons, wherever they live, in keeping with the democratic spirit of this day and age, should be to decentralize Tribhuvan University, followed by the integration of the University and private campuses, and the establishment of one university each in the Eastern, Central and Western Zones, and one for the Mid-western and Far Western Zones. The form and structure of these universities should be as recommended by the University Grants Commission. Speaking in general, the technical institutes and colleges in the area should be affiliated with each of them. However, any of the educational institutions should be free to be affiliated with any other national university on grounds of competence, standard, and recognition.

(3) His Majesty's Government should set up an Open University in the near future. Besides conducting examinations for private candidates, it should launch a 'distance' teaching programme, keeping in view the special need of Nepal for the dissemination of higher education through the informal channel. At the beginning, His Majesty's Government should provide it with lump-sum grants for 5 or 6 years. After passing through this stage, it should be able to stand on its own with the help of registration fees, examination fees, and degree fees.

(4) For the purpose of implementing the grants policy of His Majesty's Government, science should be taken under the wings of technical education. Some new science colleges should be established at the graduate level in the years to come.

(5) Research centres and educational departments of each university should be placed under one management. Such centres should be fully equipped with libraries, documentation centres and an assortment of libraries. They should be allowed to evolve into high-grade study/research institutions with a full range of equipment and amenities.

(6) As proposed under the Higher Education Council Act, 1989, the Proficiency Certificate level of study should be totally phased out by the year 2000 A.D. At that point of time, the faculties, departments and colleges under Tribhuvan University should conduct graduate and post-graduate diplomas, and M.Phil. and Ph. D. programmes.

(7) Each department, faculty, institutes and campus should be allowed to conduct separate enrolment and entrance tests, depending on its physical and educational capacities.
Graduate courses in humanities, social sciences, pedagogy, management and science should have the duration of 3 years, and they should have option for honours.

Preference should be given to honours graduates for entry into the post-graduate level. An additional one year honours course should be provided to the old 2-year graduates.

M.Phil. should be made a pre-requisite for registration in the PH.D. programmes. They should be conducted in a well-organized manner as an effective training. The courses of M. Phil., should include other relevant subjects.

The faculties and research centres should enjoy internal autonomy, if the profession of research is to be developed to a stage where it can contribute to the academic and creative activities. Research at the university level should step forward as an organized, inter-acting and interesting academic exercise. To this end, the University Grants Commission should define the role of research in higher education.

To keep up the sense of accountability in all the activities of the university, the widest possible scope should be provided for participation in the policy-making process so that it may instill in both the faculty and students a sense of individuality. The faculties should, however, be given full freedom to determine the contents and standards of their teaching and research without interference from any quarter. While formulating policies on the activities of the university, the directive principles of involvement, clarity and responsibility should be observed meticulously.

Each university, faculty and department should be encouraged to carry out long-term career-development programmes on its own, or in cooperation with any indigenous or foreign donor so that trainings, seminars, workshops, symposia, short-term study tours and professional self-improvement courses can be organized within the country.

Power should be widely de-centralized and authority appropriately delegated at the level of teaching departments, institutes, colleges, schools, centres of learning, and research centres. Barring policy matters, planning and evaluation, full responsibility should be entrusted to the proper level for the formulation and execution of programmes.

While creating higher teaching and administrative posts, the functions and roles of each of them should be clearly spelt out. Also, the pre-requisites of each post should be clearly laid down.

A board of directors may be constituted in each campus for guiding and supervising the administrative and fiscal matters, and for mobilizing popular participation. Its powers and functions will be as prescribed.

The National Development Service should be viewed as a social service and extension work. Funds should be made available to take it to the grass roots
levels. Students may join it on a voluntary basis without accumulating credit. Some of the programmes suitable for it may be cited as (a) tree-plantation, and environmental education. (b) Population education, (c) literacy drive, (d) basic education, (e) health education, (f) immunization programme, and (g) teaching of English, science, mathematics, etc. in schools. Programmes under the National Development Service should be limited to the Postgraduate level only. Incentives should be provided to make it obligatory in such subjects as rural social development and rural economics.

(18) Based on available information and studies, each university should enhance its internal efficiency, re-distribute the work-loads of its teachers, and fully mobilize all available resources including its own internal resources. Similarly, intensive and detailed studies and research should be made on the misuse and wastage of authority and resources (such as the number and cause of drop-outs, repeaters and failures) in higher education, or on the opportunities available for higher education.

(19) In the field of higher education there should be a full-fledged data bank and an information management system so that all vital charts and documents on contemporary and bygone profiles of high education can be readily available in one documentation centre.

(20) Programmes should be held from time to time to exchange views with the people in leadership positions at the universities in other parts of the world, especially in South Asia. Programmes like these will enable us to see where we stand vis a vis other universities.

(21) Each university, institute, faculty and campus should bring out its semester programme at least three months in advance for the information of the prospective entrants.

(22) Expansion of management education should be continued in the coming years in view of the enlargement of the scope of education and the professional manpower required for the country. In the proposed structure attention should be centred on the enhancement of the professional subjects as a stepping-stone on way to specialization. For education and training on different facets of management programmes should be launched in the form of formal education in the faculties, colleges and polytechnic institutes, and at the open university level, too.

(23) While conducting graduate and post-graduate courses of management in the university colleges, the number of subjects should be increased to offer a wide variety of choices. Management subjects should be developed and interdisciplinary studies encouraged, keeping in view the social demand. Along with the enlargement and consolidation of the teaching and learning scope, preparations should be made for the Ph.D. level research, and for offering M.Phil. study programmes for those who wish to take up the teaching career. In other words, simultaneous advance should be made on two fronts: the consolidation and standardization of management education, and high-level research.
(24) Study of B.L. should be open to the graduate students only. New curriculum should be developed in such a way as to make it timely and appropriate for the theoretical and professional needs of the students. A programme for L.L.M. should be worked out and recognized as equivalent to M.Phil. At this level the pattern of study should be multi-disciplinary, with an attempt to strike a balance between theory and practice in an analytical manner, Ph.D. programme should be taken in hand only after laying strong foundations for graduate courses and above.

(25) Qualified writers should be put through a preparatory, on-the-spot and scientific training course to encourage them to write standard text-books, and the manuscripts should be edited properly, printed attractively, and sold at a fair price.
APPENDIX

The University Grants Commission

His Majesty's Government shall appoint a national level University Grants Commission, responsible for clearly defining the roles of the present and prospective universities, colleges, and institutions of higher studies: for coordinating and evaluating their activities: and for determining the amounts of grants to be made available to them.

The membership of the Commission shall be as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>From among the educationists, professors and technologists, renowned nation-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 members</td>
<td>From among the educationists, professors and technologists, renowned nation-wide</td>
</tr>
<tr>
<td>2</td>
<td>Member</td>
<td>Member, National Planning Commission (in charge of education)</td>
</tr>
<tr>
<td>3</td>
<td>Member</td>
<td>Secretary, Ministry of Education &amp; Culture</td>
</tr>
<tr>
<td>4</td>
<td>Member</td>
<td>Secretary, Ministry of Finance</td>
</tr>
<tr>
<td>5</td>
<td>Member</td>
<td>Chief, National Education Advisory Council</td>
</tr>
<tr>
<td>6</td>
<td>Member</td>
<td>A person who has made valuable contributions to higher education</td>
</tr>
<tr>
<td>7</td>
<td>2 members</td>
<td>From among the Vice-chancellors of the universities</td>
</tr>
</tbody>
</table>

Total 11 members

Office-bearers of the Commission:

1) The Council of Ministers of His Majesty's Government shall nominate all the members including the Chairman, Vice-chairman and Member-Secretary.

2) Salaries and other facilities of the Chairman and other members of the Commission shall be as prescribed by His Majesty's Government.

3) The Chairman, Vice-chairman, Member-Secretary and one other member shall be full-timers.

4) The Commission shall meet at least once a month.

5) The meeting of the Commission shall be chaired by the Chairman, and by the Vice-chairman in the absence of the former.

6) The Commission may constitute a task force, consisting of experts, to study different aspects of higher education.

7) Barring the ex officio members, the members of the Commission shall serve for 4 years.

Power and Function of the University Grants Commission:
The power and function of the University Grants Commission shall be as follows:

1) To reform the present policy, relating to the provision of grants for higher education, and to evolve a national policy about it;

2) To provide grants according to the policy so laid down;

3) To mobilize governmental, non-governmental, private, indigenous and international resources in the interest of the educational development, physical expansion, and consolidation of different units connected with higher educations;

4) To advise His Majesty's Government on the operation and affiliation of the universities, colleges, institutes of higher learning, polytechnic institutions to be set up in different parts of the country with the deployment of indigenous and foreign resources;

5) To take steps towards formulating and implementing programmes suitable for the qualitative improvement of education;

6) To recommend approval for the establishment of a university, to determine its standard, and to lay down the inter-university standard;

7) To establish coordination between the Ministries of His Majesty's Government and the National Planning Commission, on the one hand, and the universities and institutes of higher learning, on the other;

8) To launch exchange programmes in the field of higher education and research between indigenous and foreign universities and educational institutions through the medium of scholarships and fellowships;

9) To provide for the formulation and execution of a variety of research programmes, besides providing the manpower at work in higher education with research opportunities:

10) To study the plans and programmes submitted by the universities and other institutes of higher learning, and to provide grants for their implementation: and.

11) To organize from time to time conferences, symposia, workshop/seminars, studies and research required for backing up the educational and academic activities, elevating the standards, and identifying and resolving the various questions at issue.
5. Higher Education (Technical)

1. **Background**

Nepal's history of higher technical education is not so long. Although the I.Sc. classes were started at Tri-chandra College in 1919, B.Sc. and M.Sc. classes were opened in 1947 and 1967 respectively. In the wake of the enforcement of the National Education System Plan, various programmes, put into operation by the different agencies of His Majesty's Government, were brought together, and production of low- and medium-level manpower in agriculture and animal science, medicine, forestry and engineering subjects was started under the aegis of Tribhuban University. Special emphasis was placed on the development of these institutes as part of the effort to prepare the manpower required for national development. In the absence of a well-founded science education policy at the national level, it was sometimes placed under general education and sometimes under technical education. Although, for this reason, it could not score as much progress as it should, its importance has at long last been recognized, and is now firmly installed as an integral part of technical education.

For some years since their establishment, all the institutes except the Institute of Science and Technology have been engaged in the production of low- and medium-level manpower. The Institute of Agriculture and Animal Science has conducted graduate level programmes in Agriculture only since 1976, and in Animal Science since 1987. The Institute of Medicine followed suit in 1975 and 1976 with the initiation of graduate level programmes in Nursing and General Medicine respectively.

Although the Institute of Engineering has opened classes at the graduate level engineering subjects since 1976, they were suspended for 4 years, and have been resumed since 1982. Similarly, the Institute of Forestry has been conducting graduate programmes since 1981. As for the Institute of Science and Technology, not only has it continued the post-graduate courses, it has also attempted to carry out Ph.D. level programmes on a regular basis.

2. **Present Situation**

Educational Programme: Different programmes have been running at present under the five Institutes, mentioned above, in the field of higher technical education. After the commencement of the process of establishing private campuses in affiliation with Tribhuban University since 1940, 7 science campuses at the Proficiency Certificate level and 2 campuses under the Institute of Medicine have been in operation. More recently Kathmandu University has been set up in the private sector, and it is going ahead full steam with the objective of imparting education in science and technology as well.

Now there are 4 campuses running under the Institute of Engineering with 17 kinds of regular programmes, ranging from the vocational to graduate levels. If the 4-year graduate level programme is confined to Civil Engineering alone, 3-year diploma courses are available in 7 engineering subjects. Other 9 programmes are vocational in nature. An engineering education project is under way, which aims at starting...
graduate programmes in 4 more subjects within three years.

Likewise, 3-year graduate courses at the Proficiency Certificate level are in operation in forestry subjects in the two campuses under the Institute of Forestry. Graduate level programmes are being conducted in only one campus. Under the Institute of Medicine there are 11 campuses, carrying out 21 types of programmes. Three of them are of the basic or vocational levels, 8 Proficiency Certificate level, 3 graduate level and 7 post-graduate level. Under the Institute of Agriculture and Animal Science there are 3 campuses, offering a five-year course in Agricultural Science for SLC pass students, consisting of 2-year pre-graduate programme and 3-year graduate programme. They are also conducting 4-year graduate course in zoology for the benefit of I.Sc. pass students.

In the 20 campuses under the Institute of Science and Technology programmes, ranging from the Proficiency Certificate level to doctorate level, are in operation. At the Proficiency Certificate level they offer two programmes of two years each, and 9 programmes at the graduate level. 4-year graduate-level programme in food technology is offered by one campus only. Other programmes in operation are 2-year post-graduate teaching in 9 subjects, in addition to doctoral programmes in some subjects.

Condition of the Campuses: Scattered all over the country, there are 40 campuses under the Technical Institutes, offering courses in different subjects of science and technology. Their geographic distribution and enrolment capacity are shown in Tables 1 and 2 below.

### Table 1

<table>
<thead>
<tr>
<th>Region-wise Distribution of Technical Campuses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Campus</strong></td>
</tr>
<tr>
<td>Agri &amp; Animal Science</td>
</tr>
<tr>
<td>Sc. &amp; Technology</td>
</tr>
<tr>
<td>Forestry</td>
</tr>
<tr>
<td>Medicine</td>
</tr>
<tr>
<td>Engineering</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

The Central Development Region has the highest number of campuses (about 47 per cent), while there is only on Proficiency Certificate level science campus in the Far Western Development Region. The Mid-western Development Region has a total of 3 campuses—1 Nursing Campus, 1 C.M.A, Campus, and 1 Proficiency Certificate level science campus.

Out of the 18 campuses in the Central Development Region, 6 science campuses, 3 medical campuses, and 2 engineering campuses are located in the Kathmandu valley. At present, the Institute of Forestry and Institute of Agriculture and Animal Science are offering no courses in these campuses. In the Western Development Region,
however, all the five Institutes have their programmes in operation,

Enrolment: The number of student enrolment in each Institute in each development region is shown in Table 2 below.

18.8 per cent out of the total of 91,826 students, studying at Tribhuban University in the year 1989/90, were enrolled in Technical Institutes. The largest number, that is, about one-fourth of the total, were concentrated in the Central Development Region. About 72 per cent of them were enrolled in the Institute of Science and Technology, causing an excessive student density in some campuses under it.

Table 2
Region-wise Distribution of Students

<table>
<thead>
<tr>
<th>Type of Campus</th>
<th>East</th>
<th>Cent</th>
<th>West</th>
<th>M/West</th>
<th>F/West</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agri &amp; Animal Science</td>
<td></td>
<td>684* (37)</td>
<td>154 (15)</td>
<td>-</td>
<td>-</td>
<td>838 (52)</td>
<td>4.8</td>
</tr>
<tr>
<td>Forestry</td>
<td></td>
<td>226 (28)</td>
<td>335 (38)</td>
<td>-</td>
<td>-</td>
<td>561 (66)</td>
<td>3.3</td>
</tr>
<tr>
<td>Sc. &amp; Technology</td>
<td>1391</td>
<td>9523</td>
<td>942</td>
<td>224</td>
<td>221</td>
<td>12201</td>
<td>71.2</td>
</tr>
<tr>
<td>Medicine</td>
<td>117 (52)</td>
<td>1038 (489)</td>
<td>235 (183)</td>
<td>141 (58)</td>
<td>-</td>
<td>1531 (782)</td>
<td>8.9</td>
</tr>
<tr>
<td>Engineering</td>
<td>158 (36)</td>
<td>1586 (166)</td>
<td>295 (8)</td>
<td>-</td>
<td>(210)</td>
<td>2039</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>1666</td>
<td>13057</td>
<td>1961</td>
<td>365</td>
<td>221</td>
<td>17270</td>
<td>100</td>
</tr>
<tr>
<td>Percentage</td>
<td>9.6</td>
<td>75.6</td>
<td>11.4</td>
<td>2.1</td>
<td>1.3</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*It includes the number of science students also.
Girl students are shown in brackets.
Students of the Institute of Science and Technology represent the total number of students enrolled in 1988/89 and 1989/90.
Table 3 below shows the number of teachers in different Technical Institutes.

**Table 3**

**Number of Teachers Level-wise**

(a) stands for 1988/89 and (b) for 1990/91

<table>
<thead>
<tr>
<th>Institute</th>
<th>Prof. (a)</th>
<th>Reader (a)</th>
<th>Lecturer (a)</th>
<th>A/Lec (a)</th>
<th>Others (a)</th>
<th>Total (a)</th>
<th>Prof. (b)</th>
<th>Reader (b)</th>
<th>Lecturer (b)</th>
<th>A/Lec (b)</th>
<th>Others (b)</th>
<th>Total (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>5</td>
<td>19</td>
<td>102</td>
<td>25</td>
<td>105</td>
<td>311</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ag. &amp; Animal Science</td>
<td>8</td>
<td>7</td>
<td>21</td>
<td>67</td>
<td>60</td>
<td>144</td>
<td>164</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry</td>
<td>5</td>
<td></td>
<td>16</td>
<td>26</td>
<td>7</td>
<td>40</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>11</td>
<td>20</td>
<td>20</td>
<td>62</td>
<td>94</td>
<td>159</td>
<td>65</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sc. &amp; Tech.</td>
<td>18</td>
<td>25</td>
<td>47</td>
<td>147</td>
<td>206</td>
<td>324</td>
<td>58</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 below gives the regional distribution of the teachers at work in different Technical Institutes.

**Table 4**

**Regional Distribution of Teachers**

<table>
<thead>
<tr>
<th>Institute</th>
<th>East.</th>
<th>Central</th>
<th>West.</th>
<th>M/West</th>
<th>F/West</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag. &amp; Animal</td>
<td>138</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td>164</td>
</tr>
<tr>
<td>Forestry</td>
<td>19</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>Sc. &amp; Tech.</td>
<td>91</td>
<td>569</td>
<td>64</td>
<td>12</td>
<td>12</td>
<td>748</td>
</tr>
<tr>
<td>Medicine</td>
<td>43</td>
<td>351</td>
<td>25</td>
<td>25</td>
<td></td>
<td>444</td>
</tr>
<tr>
<td>Engineering</td>
<td>42</td>
<td>283</td>
<td>79</td>
<td>37</td>
<td>12</td>
<td>404</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>1,360</td>
<td>229</td>
<td>37</td>
<td>12</td>
<td>1,814</td>
</tr>
</tbody>
</table>

**Note:** In the total number of the teachers in medicine are included low-grade trainers and teachers of private campuses also. The number of teachers in the Institute of Science and Technology includes low-grade trainers also.

In view of the student density in the Central Development Region, the greater number of teachers at work in that area is quite understandable. Similarly, viewed once again from the angle of student population, the number of teachers involved in the Institute of Science and Technology, should not be considered very large, compared with other institutes. The relatively small size may be explained by the fact that morning and evening classes are run in the same campus with the help of part-time teachers, especially in the Kathmandu valley.

In accordance with the National Education System Plan, which puts special emphasis on higher technical education, financial investment in it has been on the increase since the past two decades, particularly in the development of the infrastructures of the Technical Institutes and the campuses under them. Even foreign aid was mobilized for this purpose, and concrete steps were taken to build up a solid foundation for higher technical education. With the technical cooperation of the donor countries and agencies some specific programmes were launched for the training and career development of the teachers. In this connection, special mention
should be made of the assistance extended by the USAID and World Bank to the Institute of Agriculture and Animal Science, by the Japanese government to the Institute of Medicine, by the World Bank, the Asian Development Bank, etc to the Institute of Engineering, and by the World Bank and Government of India to the Institute of Forestry.

Table 5 below shows the budgetary allocations for the Technical Institutes.

**Table 5**

**Regular Budget of Technical Institutes**

<table>
<thead>
<tr>
<th>Institute</th>
<th>1988/89 (in Thousands of Rupees)</th>
<th>1990/91 (in Thousands of Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>14,051</td>
<td>34,407</td>
</tr>
<tr>
<td>Agriculture &amp; Animal Sc.</td>
<td>12,545</td>
<td>19,988</td>
</tr>
<tr>
<td>Forestry</td>
<td>4,718</td>
<td>16,303</td>
</tr>
<tr>
<td>Medicine</td>
<td>58,158</td>
<td>800,245</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>30,401</td>
<td>49,377</td>
</tr>
</tbody>
</table>

Table 6 below shows the foreign aid made available to different technical Institutes.

**Table 6**

**Foreign Aid for Technical Institutes**

<table>
<thead>
<tr>
<th>Institute</th>
<th>1988/89 (in Thousands of Rupees)</th>
<th>1990/91 (in Thousands of Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>52,458</td>
<td>24,684</td>
</tr>
<tr>
<td>Agriculture &amp; Animal Science</td>
<td>50,850</td>
<td>21,155</td>
</tr>
<tr>
<td>Forestry</td>
<td>5,501</td>
<td>16,439</td>
</tr>
<tr>
<td>Medicine</td>
<td>12,152</td>
<td>11,338</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>287</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 6 shows that the budget apportioned for the Institute of Science and Technology was less in proportion to the student enrolment, with the obvious result that the shortage of physical and laboratory facilities would cast an adverse effect on the programme. It will also be observed that the quantum of foreign aid is the lowest for this sector.

Number of teachers and financial outlay per student: The teacher-student ratio is given in Table 7 below.
Table 7
Teacher-Student Ration in Technical Institutes

<table>
<thead>
<tr>
<th>Institute</th>
<th>1988/89</th>
<th>1990/91</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>6.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Agri. &amp; Animal Science</td>
<td>8.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Forestry</td>
<td>9.5</td>
<td>10.4</td>
</tr>
<tr>
<td>Medicine</td>
<td>6.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>16.5</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Financial outlay per student is given in Table 8 below.

Table 8
Financial Outlay per Student in Technical Institutes

<table>
<thead>
<tr>
<th>Institute</th>
<th>1988/89</th>
<th>1990/91</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>7.198.00</td>
<td>18.791.00</td>
</tr>
<tr>
<td>Agri. &amp; Animal Sc</td>
<td>10,019.00</td>
<td>34,701.00</td>
</tr>
<tr>
<td>Forestry</td>
<td>8,037.00</td>
<td>28,254.00</td>
</tr>
<tr>
<td>Medicine</td>
<td>35,077.00</td>
<td>52,296.00</td>
</tr>
<tr>
<td>Sc. &amp; Technology</td>
<td>3,334.00</td>
<td>5,261.00</td>
</tr>
</tbody>
</table>

As seen from the above Table, the highest expenditure per student was in the Institute of Medicine, with the Institute of Science and Technology bringing up the rear. It may also be noted that the cost has the tendency to rise year by year. From this it may be concluded that the budget estimate was not based on any solid foundation.

Educational Schedule: Four out of the five Institutes have been conducting programmes according to schedule. Each of them maintains its own time-table without any attempt in coordinating it with those of the others, to the grave inconvenience of the students. Such a situation cannot be in favour of the proper use of the available resources. It has also been partly responsible for the mounting pressure of student enrolment on the Institute of Science and Technology. All Institutes except the Institute of Science and Technology have the track record of completing their courses right on schedule. However, the reason for the tardiness of the Institute of Science and Technology is not far to seek. Firstly, students are enrolled at the central level; and secondly, the centrally conducted examinations follow the pattern of other faculties.

Curriculum, Reading Materials and Laboratories: At present the curricula, prescribed by all the Institutes aim at producing low-level manpower and preparing the ground for higher technical education. They seem to be based on the physical facilities they have, and to meet the manpower requirement they appear to count on the products of the Institute of Science and Technology together with their own manpower, moving up from the lower level.
The institutes of Medicine, Forestry, Engineering, and Agriculture and Animal Science have libraries, well-stocked with requisite reading materials. They remain open for long enough. However, the Institute of Science and Technology does not seem to have a suitable library. Although some of the 'unitary campuses have libraries, the reading materials they have are not adequate. Even the Central Library at the Kirtipur Campus does not have science books and journals in sufficient quantity.

The laboratory facilities at the Institute of Science and Technology are out of proportion to the number of students. Relatively speaking, they are quite adequate in other Institutes, because they are under no pressure to take in more students than they can handle.

**Physical Facilities:** All the Institutes except the Institute of Science and Technology do not seem to lack physical facilities. All of them have their own buildings and libraries. With the exception again of the Institute of Science and Technology, a lot of investment was made in all of them in their formative years including foreign aid. But as science campuses are mostly of the multi-purpose nature, it has become very difficult to mark off their physical facilities. There are one or two 'unitary' science campuses, but such is the enrolment pressure on them, and the budget they operate on is so inadequate that what facilities they have appear to fall far short of what is required.

The Lamjung Campus of the Institute of Agriculture and Animal Science and the Thapathali Campus of the Institute of Engineering have no adequate hostel facilities. There are no girls' hostels in the Institute of Engineering and the Institute of Medicine. The Anvil Campus, Dharan Campus and Siddhartha Campus have hostel facilities, though to a limited extent. The Teaching Hospital of the Institute of Medicine is at the moment equipped with 300 beds.

**Career Development and Research:** Funded by its own internal resources, Tribhuvan University is conducting to a negligible extent career development programmes for the teachers with the aim to enhance the educational standards of the Institutes. The teachers themselves have on their own (without any financial involvement on the part of Tribhuvan University) been doing something to raise their academic qualifications to some extent. Besides, the foreign aid has also played a useful role in providing relatively more opportunities for career development in all the Institutes with the solitary exception of the Institute of Science and Technology.

The place of research in the educational programmes of the Institutes is very insignificant. Although the Institute of Science and Technology has the distinction of conducting even doctoral courses, they have not been executed in an orderly or well-planned manner. The same is the case with other Institutes. None of them have any research programmes of their own. One exception is the Institute of Agriculture and Animal Science, which has set up a Research Directorate in an attempt to give it an institutionalized form.

Currently, the Institute of Science and Technology has been conducting some degree-based research programmes, and conferring doctorates in some subjects, too. However, due to lack of regular budgetary support, their progress has not been orderly. As for other Institutes, they have oriented themselves towards research only
recently by opening graduate level programmes. Here also lack of regular funding has been the stumbling-block. However, thanks to the initiative shown by the teachers, some research works have been going on in those Institutes with indigenous and foreign grants.

3. Outstanding Problems

Educational Programme: Leaving out the Institute of Science and Technology, the activities of the four other Institutes have been directed towards producing the prescribed quantity of manpower at the prescribed level in the prescribed subjects. For this purpose their educational programmes and enrolment targets have been wholly tied up with the national plan, leaving them no room for playing an active role in subject-wise diversification and specialization in accordance with the national requirement and in proportion to the investment of the tax-payers’ money.

The stress laid on the higher technical education to produce middle-level manpower and the fixation of the teaching at the campuses to the Proficiency Certificate level in the initial years have had the effect of concentrating intensive expansion efforts at this level, to the exclusion of others. Unfortunately, in spite of all this rigid and single-minded planning, there has been no harmony between the demand and supply of technical manpower of the middle-level. If on the one hand, the Technical Institutes have not been able to keep up with the demand, the manpower produced by them has not been wholly absorbed into the system.

Problems Facing the Institutes

Enrolment: Several factors have combined to contribute to exacerbate the student enrolment problem. Some of the more important ones are: a. lack of any basis for fixing the enrolment target. b. absence of entrance test for admission to the Institute of Science and Technology in particular. c. enrolment of students far in excess of the target without the corresponding expansion of the requisite physical facilities, just because the target itself is flexible, d. the resulting lop-sided pressure on the Institute of Science and Technology, in particular, e. the continuous growth in the number of students passing SLC each year. f. inelasticity of the absorptive capacity of the existing technical campuses, and f. lack of concrete plans for the establishment of new ones. While enrolling students, specially at the graduate level, the other four Technical Institutes apply separate entrance tests for admitting students from different groups, and conduct different courses for some time to elevate them to the requisite standards. This practice has given rise to two problems. Firstly, it has created difficulties in securing recognition from other universities. Secondly, the examination results of other groups have not been satisfactory in comparison with the science group.

Academic Time-table: The publication of the enrolment programme of Tribhuban University immediately after the publication of the SLC results, lack of coordination between Tribhuban University and the SLC Board, irregularity in the publication of examination results of the Institutes of the University itself, resulting in the uncertainty of the date for admission to the next higher level, lack of any pre-requisite for the subject-wise syllabus, and the facility for studying at the higher level without proficiency in that subject, causing disruption in the class works at that level. -are the problems which are the direct outcomes, of the irregularity of the
educational schedule.

**Financial Problems:** Under the present fiscal rules of Tribhuban University, the Institutes find it difficult to carry out day-to-day educational activities. They find to their cost that those rules are drawbacks rather than makeweight. They are not entrusted with enough fiscal powers to carry out their programmes even within the limitations of the approved budget, even though the programmes have suffered thereby. The budgeted amount is not sufficient to meet the requirements of the Institutes. Yet, they have no freedom to mobilize resources in their own way. No specific investment has been made in the infra-structure development of the Institute of Science and Technology, which has recently been accorded the status of a technical institute, nor has it been able to attract any foreign resources. The combined result has been to demean the stature of science education in general, and higher science in particular; and to keep it in a state of decline.

Although the amount to be pumped into the higher technical education seems to be of a higher order than that of the higher general education, such is its nature and necessity that it has been just enough to build up its sub-structure. Especially the afore-mentioned four Technical Institutes stand in need for superior physical infra-structures suitable to the production of high-grade technical manpower as required for the country. In this connection, it should be recalled that at the beginning they were conceived of as 'factories' geared to the production of middle-level manpower, and were equipped accordingly. Likewise, sizeable increment in the investment should be made to build up the infra-structure and to add to the facilities of the higher science education, which has not so far received the recognition it deserves. The science of today evolves into the technology of tomorrow. The high technology which has emerged recently is nothing more than a by-product of science. Viewed against this background, to lay stress on higher science education and to invest in it at an increasing rate should be regarded as a categorical imperative.

Currently, 20 per cent of the total education budget has been ear-marked for higher education, with the technical education claiming the lion's share. More than 90 per cent of the regular budget is used up to meet the operational cost, and the bulk of the development budget is made up of foreign aid. Under the circumstances, it has not been possible to repair and maintain the existing infrastructures, on the one hand, and to ensure, on the other, the quantitative and qualitative enhancement of higher technical education by pulling them to optimum use. Whatever the austerity measures taken, and however intense the mobilization of internal resources, the dependence on foreign assistance will remain a fact of life for some time to come.

**Problems of Educational Management:** The low degree of the teachers' involvement with educational management, the adverse impact on the academic atmosphere due to the presence of a large body of administrative personnel, the short-sighted decisions taken at the central level to solve the problems, facing a faculty or an institute, disregard of its long-term interest, the lack of autonomy, especially in the case of the Institute of Science and Technology, to devise, the enrolment, teaching and evaluation process suitable to their own speciality, and the lack of a definitive national estimate of the manpower requirement—all these diverse factors, acting simultaneously, have destabilized the enrolment and production targets of the Institutes. Strangely enough, no attempt has so far been made to frame
a concrete policy to reverse the trend in the context of the changed circumstances and in response to the aspirations of the people.

Some other serious management problems, marring the educational landscape may be enumerated as follows: a. the limited scope for selecting quality students, because no refinement has been introduced in the form and mechanism of the SLC examination: b. the uncertainties, marking the time-table of the university, and their adverse impact on the private campuses, requiring them to run the classes for 14 to 16 months in one academic year: and c. the imposition of a different and separate set of policies in the Institute of Science and Technology, obliging it, unlike other Institutes, to have central departments like a faculty, and saddling it with administrative administration only. As a result, it has not been able to contribute to conducting educational programmes like other Institutes.

**Targets of the Higher Technical Education:** Science and technology have triggered dramatic changes in the life man, and there are clear signs that such changes will continue to gather momentum in the next century also. Developed or industrialized countries are busy developing and applying more and more advanced technologies, and creating a new economic order, widening still further the gulf between them and the Third World countries.

In this context, the proper use of science and technology in our country has become a matter of paramount importance. if we are to wipe out our economic backwardness, and fulfill our basic necessities by orienting ourselves towards modernization. Only the promotion and utilization of our national capabilities in the field of science and technology will enable us to raise farm output and productivity, to move along the path of industrialization as the best means of mobilizing local resources and creating a bigger job market, and to create opportunities for export and for the fulfilment of the needs of our own without damaging the eco-system.

At present, there is a huge dearth of high-level manpower in the field of science and technology. According to the World Bank data, for example, there was one doctor for every 29,000 persons in Nepal in 1981, whereas the proportion was much lower in the neighbouring countries. In the same year India had 1 doctor for 4,000 persons, Pakistan 1 doctor for 3000 persons, Bangladesh 1 doctor for 10,000 persons. and Sri Lanka 1 doctor for 7,000 persons. At present Nepal is estimated to have 1 doctor for every 17000 persons.

Nevertheless, this proportion is very high, compared with the neighbouring countries. The problem assumes a more sinister aspect, when it is realized that In our country doctors tend to gravitate around the urban areas, leaving the villages with virtually no medical coverage. The same is the case in the fields of science, engineering, agriculture, forestry and others. The figures, collected five years ago, reveals that Nepal had 28 high-level scientific and technological manpower for every 100,000 persons, whereas in the same year the number in Bangladesh, Sri Lanka and India was 45,580 and 386 respectively. In the view of the UNESCO, a less developed country like ours requires 140 high-level scientific and technological manpower for every 100,000 of the population to ensure fast-moving and far-reaching socio-economic progress.
**Proportion of Technical Students in Higher Education:** In our country today there is about 19 per cent of the student population enrolled in technical subjects of higher education. Out of it 13 per cent is taking up science subjects, and the remaining 6 per cent is engaged in other science subjects. In the developed countries the proportion is 50-50. The developing countries, including our neighboring countries are striving to get near to that ideal combination. However, the prevailing trend in our country has been to enlarge the scope of general education to meet the rising demand for higher education for two reasons. The first and the more obvious one is the dearth of resources. The second is the fear on the minds of the policy-makers that the production of high-level technicians at a great cost to the treasury may aggravate the existing problem of educated unemployment, and thus be self-defeating or counter-productive.

As regards the Institute of Science and Technology, the national plan does not specify with any certainty the demand profile of the manpower produced by it. As its enrolment policy is very flexible, the student population in some of its campuses has become intolerably dense over the years. Viewed sometimes as a general institute and sometimes as technical institute, it has not attracted any significant investment for the development of its physical amenities and educational programmes. The disproportionate enrolment of students vis a vis the available physical facilities has cast a shadow on the academic climate. The disease has spread over to the post-graduate classes also, causing a decline in the standards of the students who are to grow into scientists and science teachers in the future. This situation is too dangerous to be left alone, for it may put the system of science and technology education at a risk.

The Institute of Science and Technology is afflicted with the strange malady of adding levels and opening new courses on the demand of the students. But due to lack of ways and means and a well-knitted approach, such programmes too are not running smoothly. More than a decade has passed since this Institute has conducted graduate classes in the food technology at its Dharan Campus. Of course, the importance of such a course is self-evident in a mainly agricultural country. But it is in a paralyzed stale, owing to budgetary shortfall and the absence of additional investment. Enrolment targets are fixed on a short-term basis. It has the lamentable tendency to ignore the advisability of producing quality manpower. In other words, it is not properly geared to fulfill any demands that might arise in future, giving rise to the fear that it may not be able accelerate the development of the country, if it is called upon to do so.

It may be stated at the risk of stressing the obvious that higher technical education promotes the technical and scientific awareness in the country, it helps create talented technical manpower, capable of generating self-employment, besides opening the doors for more employment. Viewed in this context, the plan of action in this area should be to increase the opportunities for higher technical education and to progressively increase the number of students with the ultimate aim of attaining the target of 50-50. To this end, the educational programmes and academic activities of the Technical Institutes should no longer be dictated by the manpower requirement forecasts of the National Planning Commission alone. The Institutes should mount studies on the demand and opportunities of employment on their own, and lay down their own enrolment targets and educational programmes, without
ignoring or overlooking the demand forecast of the National Planning Commission.

Text-book and Reading Material: The process of modernizing and updating the curriculum has not been regular. The change in the curriculum has not always been followed by improvement in laboratory facilities. Reading materials have never kept pace with the increment of student enrolment. The laboratories are small in size and short of equipment. Such, in brief, are the specific problems of the Institute of Science and Technology concerning text-books and reading materials. Other Institutes also manifest, more or less, the same symptoms. The malady is the same: its intensity may differ from case to case.

Tribhuban University has job-related programmes like Assistant Nurse Midwifery, Automobile Mechanics, Power Mechanics, Junior Technician, Junior Technical Assistant, Forest Ranger and so on. That has created many problems. The consumers complain that the standard of the product has declined steadily. On the other hand, the numerous attempts at changing their curricula link them up with the graduate level have given rise to another series of problems, including the recognition of the degree by the outside world. To solve these problems changes were made in the duration of the courses, curricula and entrance pre-requisites, obliging the students to spend more time to graduate from one level to another. The entrance test for those passing the Proficiency Certificate level in science was differentiated from those in other technical subjects of the same level. Moreover, different groups were required to complete additional syllabi. But this kind of patch-work has helped create new problems, instead of solving the old ones. The remedy has proved worse than the disease.

Besides, there are certain other provisions which cannot be considered just or proper. For instance, a student passing the Proficiency Certificate level in science is prescribed an additional course of one year before he is admitted to the graduate course in medicine, while the graduate course in forestry is open only to the science graduates, and they are admitted to the second year of that course after completing three-month supplementary study. And the fact that, in general, the students coming from the science group produce better results in most cases is a clear indicator that something is wrong somewhere.

Therefore, it is essential that the problems in this area be analyzed and resolved so that higher technical education can be of a standard which guarantees its equivalence with the degrees awarded by the outside world, including the SAARC countries. For this purpose, the existing curricula should be reviewed to make them conform to the standards of the renowned universities of the world, specially the SAARC countries, and to determine the subject-matters in such a way as to make one uniform entrance test applicable to each level of higher technical education.

Mobilization of Resources and Privatization: Being the least developed country, it is but natural that Nepal should have many areas, clamoring for investment. In our country at present only 2.1 per cent of the gross domestic product (GDP) is invested in education compared with 3.1 per cent of other least developed countries on average. In view of the crucial role of the human resources development in the progress of man and his society, it is essential that the present percentage be raised to the average level of other countries in the same bracket. On the other hand, the UNESCO and the Third World Science Academy have recommended that 25 per
cent of the education budget should be funneled into higher technical education. And if that 25 per cent is distributed proportionally between general science education and higher technical education, it would be easier to achieve the desired goal.

Pursuant to the policy of emphasizing the production of skilled technical manpower required for the planned development of the country, appreciable investment has been made in developing the physical infra-structures of the four Technical Institutes and their campuses, with more of the same on the pipe-line. Most of them has been brought into being with funding from foreign sources. Their repair, maintenance and other operational costs have to be borne from internal sources, except at the beginning of the project when all expenses were taken care of by the donor countries or agencies. As operational costs tend to go up with the passage of time, steps should be taken to optimize their use, to stabilize the programmes, and to generate some return from them, with the ultimate aim of making them self-sustainable. In this way, the Institutes should work for financial autonomy, instead of looking up to the government for all their needs.

In this connection, utmost incentive should be given to the private sector in the hope that it will be able to deliver the goods through the effective use of the resources and expert management, and to raise the quality of education in an atmosphere of healthy competition. At present, if a campus affirms on its own its readiness to go private with some grant from the Tribhuvian University there is no legal provision to enable it to do so. As most of the private campuses have no buildings of their own and have to rely on part-time teachers to run the courses, timely steps should be taken at the national level to tackle this issue, and stabilize the process of privatization.

Research Programme: Under Tribhavian University there is an Applied Science and Technology Research Centre. But it has been kept away from the main stream of education. In fact, research and higher education have never been viewed as a supplement of each other. It is not equipped to launch such a policy. It has no separate budget to carry out such an integrated programme. When in due course of time a research policy is authoritatively formulated, it should take into account both sides of the coin: the practical national requirement and fundamental academic interest.

Higher Secondary Education and Higher Technical Education: The Technical Institutes of the Tribhuvian University are at present running different courses at the lower level and Proficiency Certificate level to meet the demand for the low-level and middle-level technical manpower also. They should be allowed to operate them for some time, because if they are closed down forthwith, no new programmes can be launched with the kind of infra-structures they have.

In this connection, the most important thing to be borne in mind is that, once the higher secondary education is in place throughout the length and breadth of the country, the entire paraphernalia of higher education will be centred on graduate and post-graduate levels only. It means that at that stages each Technical Institute will start its programme at the graduate level. Our past experience tells us that entrance to this level should be limited to the students who have passed the higher secondary school in the science group, and the required qualification for entrance should be formulated with the same end in view.
Of course, everybody should have the right to go in for higher technical education, provided that he has the required qualification. The policy should be to allow every candidate to go through the same entrance test, and those who make the grade will be admitted to higher technical education.

The special preference given to students from the science group will generate keen competition among the intelligent students all over the Kingdom, and contribute to raise the quality of the programme. It will also enable the Technical Institutes to concentrate their resources on the teaching and research of relevant subjects. The only apparent flaw in this arrangement is that most of the students, passing the skill-oriented and job-oriented technical and vocational groups will be deprived of the opportunities for higher education. What will happen to those among them who wish to execute higher education? The answer lies in the establishment of polytechnic colleges, where they will be easily accommodated. Under this arrangement the supply-side problem of various categories of technical manpower will be resolved without compromising the quality of higher technical education.

Once the teaching of technical subjects is included in the higher secondary (ten plus two) education under the aegis of the Higher Secondary Education Council, different institutes, offering lower and Proficiency Certificate level programmes, will come within its ambit. At that stage the programmes of the University Institutes will be conducted at the graduate level and above with the help of a limited number of campuses.

4. Recommendations

In the context of the present condition of higher technical education in the country and the problems standing in the way to the smooth implementation of the educational programmes, and keeping always in view the position of special importance which it will assume in the future scheme of things, the following recommendations are put forward to pin-point the timely reform measures that should be introduced as soon as possible in the interest of the quantitative and qualitative growth of higher technical education.

1. Higher technical education should be consolidated, expanded and developed within the framework of a concrete policy, and with the eyes focused on the high-level scientific and technical manpower needs of the country.

2. The Institutes should determine and execute their own educational programmes and enrolment targets, utilizing to the full of their own resources, creating job opportunities, and paying heed to the manpower requirement forecast of the National Planning Commission.

3. As far as practicable, the lower and Proficiency Certificate level programmes of Tribhuban University should be phased out by the year 2000 and taken over by the units concerned under the higher secondary education. Besides, polytechnical colleges should be established in course of time for the promotion of skill-based higher education.

4. Some of the technical campuses, conducting Proficiency Certificate level courses only, should be upgraded to conduct graduate level programmes only
depending on their capacity and regional requirements.

5. Full autonomy should be granted to Technical Institutes to plan and execute all activities required for raising their level of efficiency except the conferring of Degrees. The colleges should also be invested with similar freedom of action.

6. The Technical Institutes should be evolved into full-fledged universities on the basis of their competence and capacity to teach other related subjects.

7. As the Technical Institutes have to carry on the business as usual even after the drying up or discontinuation of external support, they should observe the policy of mobilizing internal resources to meet as much of the operational cost as possible with the ultimate aim of standing on their own legs.

8. The present Institute of Science and Technology should be fully developed like other technical institutes with well-equipped laboratory, well-stocked library etc.

9. The current Food Technology programme should be consolidated and expanded, and other programmes should be evolved and put into effect as required.

10. Traditional technologies should be modernized and developed. In this connection, Incentives should be given for the consolidation and extension of Ayurvedic education.

11. Investment in higher science education should be stepped up to counteract the declining educational standards in different science campuses, where the pressure of student population has far outstripped the existing physical infrastructures and facilities.

12. Coordination should be effected between the technical institutes and government units concerned to enable the former to make use of the facilities available with the latter as may be ordinarily required in the course of study and research.

13. While building up new infra-structures in connection with the development and expansion of higher technical education, attention should be devoted to the requirements of the balanced regional development.

14. A unit within each technical institute should be developed as a centre of excellence on the basis of the merit of the programmes which it has carried out with outstanding results.

15. Programmes should be launched on a regular basis to make higher technical education timely, qualitative and relevant. To this end, contact with outside universities should be increased in frequency and widened in scope. Exchange programmes of teachers and students should be stimulated. At the same time, continuous and unremitting efforts should be made to bring higher technical education in line with the standards prevailing in other
countries, especially in the renowned universities of the SAARC countries.

16. With a view to bringing about uniformity in the graduate-level courses, only one kind of entrance test should be administered on and from 1994/95 in place of separate tests for science and other groups, and enrolment should be made from among the successful candidates on the basis of merit.

17. The duration of the graduate level in all technical subjects other than science and medicine should be ordinarily 4 years. In general, it should be 3 years for science, and four and a half years for the MBBS course.

18. Teachers and scholars should be associated to the maximum with the policy formulation and decision-making processes concerning educational programmes. All necessary powers should be delegated down to the departmental level to give greater impetus to this scheme. Special attention should be given to such matters like career development, promotion and incentive awards to raise the morale of the teaching community. A well-grounded mechanism should be worked out to facilitate inter-university transfers.

19. Research and higher education should be evolved as a supplement of each other. Research should form an inseparable component of every department which conducts graduate courses or above, and as many teachers as possible should be associated with research works. Governmental, non-governmental and private agencies should be induced to commission the university for their research programmes.

20. The technical institutes should not function as mere centres for the production of technical manpower. With the provision of tax concessions and financial subventions, they should be encouraged to become catalysts for enhancing the scientific and technological capabilities of the country through research and development works. They should also assume leadership roles in resolving the technical problems appearing in the course of national development. Besides, appropriate rules should be framed to orient the departments and other units of His Majesty’s Government towards this direction.

21. The technical institutes should be encouraged to keep abreast of the new developments in the field of high technology, and to study and Leach them depending on their relevance to the Nepalese context.

22. Intelligent and gifted students should be provided with scholarships. Special attention should be given to counseling, sports, students' welfare, work study, and similar other programmes.

23. Arrangements should be made to have scholarships and confessional loans granted to promising but poor students belonging to backward sections of the society.

24. One of the responsibilities of the University Grants Commission should be to devise policies and chalk out guide-lines for the improvement and
development of higher technical education, to make an impact survey of the programmes, and to extend financial grants. It should have proper representation of scientists and technologists.

25. In the coming years the target should be to gradually increase the percentage of student enrolment in higher technical education until it reaches 40 per cent of the total within ten years. Another thing to be aimed at should be to invest 1 per cent of the GDP in this sector.

26. People's participation and private sector's involvement in higher technical education should be increased. Besides, it should be included as required in the colleges and universities to be set up in course of time.
6. SANSKRIT EDUCATION

1. Background

Sanskrit has been taught in Nepal since times immemorial. Before the advent of the western trends in education, it was current in the whole of the country as the disseminator of oriental thoughts, and science and art. For this reason, not only has it influenced the cultural life of Nepal, it has also dominated its values and norms.

From the ancient to the medieval ages Sanskrit was taught in the Gurukul tradition, or a system of education under which the pupils spent the whole of their student life as members of the tutor's (the Guru's) household (Kul). Admission to such establishments was free of cost. They were sustained with State patronage, charity of the devotees, and the alms collected by the pupils themselves. Slowly, with the passage of time such institutions faded away; but the proponents of Sanskrit, acting on their own with a good deal of sacrifice and suffering, kept the torch of Sanskrit education burning bright by reviving the ancient tradition of turning their homes into schools.

The history of Sanskrit education in an institutionalized form is not very long. Well before 1875 a Sanskrit school was established in Kathmandu, the capital city, which took the form of a State school a couple of years later under the name of the Ranipokhari Principal Sanskrit School. The year 1875 also witnessed the establishment of another Sanskrit school in Dingla, Bhojpur district. It was followed about 10 years later by the setting up of the Tin Dhar Sanskrit Hostel in the capital. The contributions made by these institutions in the expansion of Sanskrit education have been quite remarkable. Afterwards, Sanskrit schools came into being in places like Janakpur, Matihani, Ridi, Kalaiya, Taulihawa, Pokhara, Palpa and Dang.

With the opening at one stroke of 75 vernacular schools in 1891 the propagation of Sanskrit education in an institutionalized form gathered momentum. The trend, once set, became irreversible. Vernacular schools and Sanskrit schools multiplied side by side, one helping the other, so much so that by the year 1953 the number is estimated to have reached 233. However, in the course of implementing the recommendations of the National Education Planning Commission (1954) all such educational institutes of the primary and lower secondary levels were closed down. To Sanskrit education that was a great blow, which has not been made up for till today.

Then came the Comprehensive Education Committee (1961), followed by Sanskrit Education Reform Consultative Committee (1966) and National Education Advisory Council (1968). Recommendations were made, but Sanskrit education remained where it was. In appreciation of the importance of Sanskrit education, the National Education System Plan (1971/75) set up the Institute of Sanskrit under Tribhuban University in 1973. At the same time, it also abolished it as a compulsory subject of general education, permitting its teaching in the secondary schools from class 8 and above only. This scheme did not produce the desired result, because student enrolment in such schools was too low, forcing them to lead a precarious existence.

Since 1916 Ranipokhari High School was running degree classes in Shastri and Acharya, sending the deserving students to Benares for examination under an
informal arrangement with the Benares Hindu University. Things were formalized in 1933 with the appointment of teachers in various subjects. Examination, however, continued to remain an informal arrangement.

The State Sanskrit College was established in 1951, which was formally declared open by His late Majesty King Tribhuban a year later. The same year witnessed the setting up of the Pindeshwar Mahabidyalaya (a private college) in Dharan, East Nepal. Another college, the Janata Sanskrit Mahabidyalaya, came into being in Dharan in 1954. Sanskrit high schools were opened in Janakpur, Mathani, Kalaiya, Taulihawa and other places. Their common plan was to give Shastri (graduate) and Acharya (post-graduate) level education and to send off the meritorious candidates to Benares for examination on an informal basis—a practice, which continued till Tribhuvan University started to conduct the examinations.

Later, the Yajnabalkya Sanskrit Mahabidyalaya and Lakshmi Narayan Sanskrit Mahabidyalaya were established in Janakpur and Mathani respectively with the approval of Tribhuvan University. Thus, before the coming into force of the National Education System Plan there were 5 Sanskrit colleges in operation in Nepal. The Acharya (post-graduate) level education has, however, been confined to the Kirtipur campus of Tribhuvan University since 1965.

After the enforcement of the National Education System Plan, the central office of the Institute of Sanskrit was set up in Dang. The Yajnabalkya and Lakshmi Narayan colleges of Janakpur and Mathani were merged under the name of Yajnabalkya Lakshmi Narayan campus in Mathani. The Acharya classes of the Kirtipur Campus were integrated with the Balmiki Campus. The Institute of Sanskrit made an attempt to start doctoral courses, but it proved to be a house built on sand.

A post-graduate campus was set up later in 1982 at Beljhundi, Dang. The Royal Higher Education Commission, which was appointed in same year, recommended the establishment of a Sanskrit university. In the light of this recommendation, among other things, the Mahendra Sanskrit University was set up in 1986. Since then three Sanskrit Bidyapiths (centres of learning)—Ruru Bidyapith in Ridhi, Hajari Janakpur Bidyapith in Janakaapur, and Sharada Bidyapith in Mahendra Nagar—have become operational.

2. Present Situation

Sanskrit Secondary Education: In the Kingdom today there are about 43 Sanskrit secondary schools, conducting classes from 8 to 10 with the permanent or provisional approval of the authorities concerned, Some of them follow the Gurukul pattern of teacher-pupil relationship. From all these schools 717 students were sent up in 1990 to sit for the pre-Madhyama (SLC) examination, with 648 of them, or 90 per cent. making the grade. Compared with the pass percentage of the total SLC examinees, this result is very encouraging. But the fly in the ointment is the small quantity of student enrolment.

Sanskrit in General Education: Sanskrit papers of 50 marks each are included in classes 4 and 5, and papers of 30 marks each in classes 6 and 7 of general education. From classes 8 to 10 Sanskrit figures as an optional subject only. Similar is its status in the faculties of humanities and social science in general higher education. In those
faculties there is provision for the teaching of Sanskrit from the Proficiency Certificate level to post-graduate level.

**Place of Sanskrit in Higher Education:** At present, Sanskrit classics are taught in the 8 Bidyapiths under Mahendra Sanskrit University. Of them one conducts courses from pre-Madhyama to Acharya level; three, from pre-Madhyama to graduate level; one, Acharya level only; and three, pre-Madhyama only. Their total number of student enrolment is now 1,003. More than half of them have come from India after passing pre-Madhyama. Research programmes are handled separately by Mahendra Sanskrit University. There are 2 Sanskrit secondary schools, operated directly by it with the student population of 1,000 in round numbers.

3. **Main Problems**

Under the current system of education Sanskrit education is passing through hard times. As there is no national policy on education, its programme has not been effective. It has been forced to lean heavily on the traditional style. Its main problems may be enumerated as

a. The incompatibility of its structural form with that of the contemporary international world;

b. The shortage of sanskrit schools;

c. The low density of student population in higher sanskrit education, owing to lack of incentives measures to attract students towards it;

d. The mutual contradiction between the shortfall of production and uncertainty about the absorption of the output;

e. The lack effort to formulate and implement to develop and expand courses of technical and professional education based on sanskrit; and

f. Disharmony between the curricula of the university and secondary schools.

As has been stated above, the number of Sanskrit secondary schools is very low, and some of them are not running on a solid and well-organized basis. Where Sanskrit is compulsory, the curricula and text-books are designed to teach subject-matters, rather than the language itself. There is no provision for teacher training, and the system of inspection and follow-up is not well activated. Because of the non-availability of financial resources, educational and physical progress has become an uphill task.

There are some schools that have their own landed properties, but they have not proved to be a dependable source of income, because they are not properly safeguarded and managed. Another problem is posed by the shortage of subject-wise teachers, and adequate provision of dormitories for students.

A survey of higher education reveals the fact that plans have not been devised nor programmes evolved for the achievement of the targets. The number of students at the university has never been adequate to meet its operational costs, because no serious and powerful action has yet been taken to familiarize the general public with
the wealth of knowledge hidden inside the Sanskrit literature. The foreigners who wish to gather the fruits of wisdom from the garden of Sanskrit have not been provided with opportunities to satisfy their desire. The feasible sources of income have not been tapped in an effective manner.

On the educational and academic side, no serious attempt has so far been made to improve the standards. The highly qualified Sanskrit manpower has little or no scope for deployment. Another problem is that there is no regular arrangement for developing curricula, and for planning and publishing appropriate text-books and other reading materials. There is also no provision for the teaching and development of Sanskrit-based technical knowledge, although its great need for the country has never been gainsaid. Sub programmes for research as there are, are neither effective nor tailored to the needs at home and abroad. Mahendra Sanskrit University itself is in a tottering condition for want of a strong economic base. Unfortunately, the tendency has always been to invest more in the administrative and managerial aspects than in the educational and academic aspects. This trend should be reversed at all costs.

Mobilization of resources has never been much of a problem, as its financial underwriter is His Majesty's Government. Perhaps it is for this reason that no atmosphere has emerged in favour of strengthening its material facet and orienting it towards self-reliance in future. The entire expenses of all the approved Sanskrit secondary schools, and 98 per cent of the budget for higher Sanskrit education are being borne by His Majesty's Government. According to the report published by Mahendra Sanskrit University, the income from its holding in Dang yielded Rs. 227 per bigha, suggesting that it has not been properly cultivated. For want of irrigation facilities the 326 bighas of land under its possession in Beljhundi are almost lying fallow. From this it will be obvious that the internal resource base of Sanskrit education is very weak.

4. Recommendations

(1) The main aims of Sanskrit education should be 1. to produce individuals who are able to cherish the national culture, values and norms of Nepal: 2. to keep alive the tradition of learning various classical subjects of Sanskrit: 3. to assist the growth of the national language along with other native languages or vernaculars: 4. to popularize the masterpieces of Sanskrit literature and classical thoughts: 5. to benefit the nation through the medium of pragmatic knowledge like the Ayurveda, astrology and Yoga: 6. to revive the tradition of the study and research of the Sanskrit lore: and 6. to establish Nepal as an international centre for such studies and research.

(2) While drawing up the curricula of Sanskrit education, careful attention should be given to the national background of education and the international prestige of Sanskrit education.

(3) Efforts should be continued to make Sanskrit education timely, socially beneficial and dynamic.

(4) Attempts should be made to lift the tradition of Sanskrit education from the national to the international level.
Sanskrit subjects should be taught through the medium of Sanskrit from the pre-Madhyama to Acharya levels. But as regards general education, they should be taught through the national and international languages.

The structural form of Sanskrit education should be as given in Table 1 below, as it is designed to harmonize it with the main stream of national education, while preserving its own distinct identity.

**Table 1**

<table>
<thead>
<tr>
<th>Primary Education</th>
<th>Secondary Education</th>
<th>Higher Secondary Education</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Madhyama, Post-Madhyama and Shastri, Acharya, Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, 3, 4</td>
<td>5, 6, 7, 8,</td>
<td>9, 10</td>
<td>11, 12, 13, 14, 15, 16, 17</td>
</tr>
</tbody>
</table>

Sanskrit Secondary Schools Mahendra Sanskrit University

a) There should be no separate primary schools for Sanskrit education.

b) The provision for secondary Sanskrit should be maintained for classes from 6 to 10.

c) Separate arrangement should be made at the higher secondary level (ten plus two) for Sanskrit education.

d) The duration of the Shastri (graduate) level should be 3 years, and the Acharya (post-graduate) level 2 years.

e) Ph.D. programmes should be conducted with admission open only to those who have passed the one year M.Phil. course.

f) On completion of each level Sanskrit students should be allowed shift to general or technical education, if they pass the requisite entrance tests, and vice versa.

g) As in general education. Sanskrit education also should be provided with non-formal and distance education.

5. Sanskrit Secondary Education

(7) Each district should have at least 1 Sanskrit secondary school, depending on local propriety and economic feasibility.

(8) Slack Sanskrit secondary schools should be shifted to places where there is public interest.

(9) The curriculum of Sanskrit secondary schools should be designed to teach Sanskrit language from classes 6 to 8, and different optional subjects in classes 9 and 10. Text-books and other reading materials should be produced.
accordingly.

(10) Every Sanskrit teacher should be obliged to receive subject-wise training.

(11) Every Sanskrit secondary school should have a hostel, with the enlistment of local support. Moveable an immoveable properties also should be used for this purpose. Better still. individual donors should be encouraged to build hostels as their monuments of good will and faith.

(12) A Sanskrit Education Inspection Unit should be set up under the Ministry of Education and Culture to supervise and strengthen the educational programme.

(13) The Sanskrit secondary schools, operating under Mahendra Sanskrit University, should be brought under the wings of the Ministry of Education and Culture like other secondary schools.

(14) Compulsory subjects, taught in general lower secondary schools, should also be included in Sanskrit lower secondary schools from classes 6 to 8, with Sanskrit as an optional language.

(15) Compulsory subjects, taught in general secondary schools, should also be included in Sanskrit secondary schools, with Sanskrit, the Vedas, grammar, literature and other classical subjects as optional subjects. Extra optional subjects should include priestly functions, the Ayurveda, or any one of the subjects prescribed for general secondary schools.

7. Higher Secondary Education

(16) Students, passing Sanskrit secondary schools or equivalent should be admitted to the higher secondary level.

(17) Compulsory subjects of general higher secondary schools should also be compulsory in Sanskrit higher secondary schools, with the addition of at least two papers in the Sanskrit language and literature. In the group 'a' of optional subjects should be included 4 papers in any one of the classical subjects like the Veda, grammar and literature; while in group 'b' it would be appropriate to include subjects like economics and political science.

(18) Students, passing out of general secondary schools without Sanskrit subjects, should also be given entry into Sanskrit higher secondary schools, if they pass the test on pre-requisite subjects.

(19) Sanskrit secondary schools should be allowed to run higher secondary classes, if they meet the minimum educational and physical requirements.

(20) There should be a Sanskrit Unit under the Higher Secondary Education Council to manage Sanskrit higher secondary education, to prepare textbooks, to mount inspections, and to conduct examinations. The pre-Madhyaarha level programmes, which are now being carried out by the Mahendra Sanskrit University, should be gradually brought into its fold.

8. Higher Education
(21) For the promotion of pragmatic and technical knowledge an Institute of Ayurbijnan (the Science of Life) should be established under Mahendra Sanskrit University. It may also conduct theoretical and practical courses in naturopathy.

(22) As regards research, it should include degree-based activities like the Ph.D. along with short-term and long-term research projects in the various disciplines of Sanskrit.

(23) Separate Centres of Learning should be installed for the study of the Ayurveda and Buddhist philosophy.

(24) Centres of Learning, currently in operation, should be strengthened, and encouragement should be given to the mobilization of private resources for the establishment of new ones.

(25) Training programmes should be launched in the field of research and text-editing technologies.

9. Others

(26) Language courses should be conducted for the benefit of Nepali and foreign nationals who wish to learn Sanskrit, Pali and Prakrit.

(27) Training courses in 'priestcraft' should be launched to produce middle- and high-level manpower to meet the religious and cultural requirements of the country.

(28) Primary classes, running as basic classes, in Sanskrit secondary schools should offer Sanskrit along with mother tongue and other languages.

(29) People should be encouraged to establish and operate Gurukul type of teaching establishments.

(30) Special scholarships should be instituted to attract women and people from all walks of life towards Sanskrit education.

(31) Steps should be taken to train the persons, passing pre-Madhyama and Shastri levels, to teach in classes 6-8 and classes 9-10 respectively of Sanskrit education. Separate Sanskrit teachers should be appointed to teach compulsory Sanskrit in general secondary schools, and training should be given to them.

(32) Rules of appointment, promotion and security of service of Sanskrit teachers in secondary and higher secondary schools should be similar to other teachers of the same level, and be the administered by the same authority.
7. TECHNICAL AND VOCATIONAL EDUCATION

1. Background

Technical and vocational education in the traditional form has been in existence in Nepal since ancient times. A look at the exact specimens of sculpture, architecture and other works of art makes it clear that they were the products of vocational education. In modern times its beginning may be traced back to the year 1945, when a scheme of Basic Education, based on handicraft, was launched. The next step in this direction was taken in 1956 with the introduction of secondary level education in agriculture, industry, home science, and secretarial science through the medium of vocational education.

However, it was only after the revolution of 1950/51 that the need for trained manpower for national development was brought into sharp focus. And during the two decades after the introduction of democracy steps were initiated to produce low-level and middle-level manpower. Prominent among them were Junior Technical Assistants, Assistant Nurse Midwives, Overseers, Surveyors and Rangers. Training Institutes of that nature had been established well before the launch of the First Five-year Plan (1955). By the time the Third Five-year Plan was completed, Nurses Training School, Normal School. Forestry Schools, Health Assistant Training School, and Engineering School had gone into operation. During this period a number of young men were sent abroad for higher technical education, especially to India, Japan and the USA. But a beginning was made in providing opportunities for vocational education and producing trained manpower within the country itself in a systematic manner only with the National Education System Plan 1971-1975.

The National Education System Plan provided for pre-vocational subjects in lower secondary schools and compulsory vocational subjects in the secondary schools all over the country. Its aim was to give scientific knowledge and skill to the students who could not afford the cost of higher education. It was hoped such knowledge and skill would enable them to set up their own business. Courses were conducted with the same end in view. However, the target set for the production of skilled manpower was not realized in fact for two main reasons. Firstly, the curriculum put more emphasis on theoretical matters than on practical skills. Secondly, the number
of teachers and volume of educational materials fell far short of the actual requirement. Actually what is required of technical and vocational education is that it should be practical and less expensive. Its main thrust should be to push forward those who have fallen behind the race for economic betterment. It should aim at producing basic and middle-level skilled manpower, raising the present standards of living, and assisting in Nepal's economic growth.

The Institutes of Engineering, Forestry, Agriculture and Animal Science, and Medicine, which were brought into being under the National Education System Plan, got off the ground, producing skilled workmen and high technicians, at a time when the country was launching a campaign for national development and construction. But they paid less attention to teaching practical skills. Under the circumstances, an exodus of skilled labour, especially of the lower level, from the neighbouring country was sparked off.

Faced with this situation, vocational schools were opened in Jumla, Jiri, Dhankuta and Lahan. The aim was to have them fully equipped, though small in number. The mechanical training centres, which have been in existence long since, were merged with them. 80 per cent of the curricula of those schools were devoted to teaching practical skills, giving rise to the hope that they would produce skilled manpower in sufficient quantity.

2. Present Situation

Social Aspect: There is a strong sentiment in our country that an educated person should not take up skill-based vocation, and that manual labour should be shunned at all costs. Most of the Skill-oriented occupations (such as metalcraft, carpentry, masonry, leather work, tailoring, weaving, etc.) continues to carry on the caste bias. Although some importance is attached to technical education as a stepping-stone for climbing up, the popularity of vocational occupations and vocational training is at a low ebb.

Ignorance of the fact that skill plays a big role in agro-based activities, and the slow rate of industrialization, have combined to make it seem that skill-oriented jobs are at a discount, and the people are not enthusiastic about it. The challenge before us is how to bring home to the educated people, and the people in positions of leadership, that skilled manpower is the backbone of national development. The task of creating
interest in vocational and technical education among the general public is also equally challenging.

**Employment, Manpower and Industrial Policy:** The labour market feed-back is not effective. There is only a very limited public flow of information about what kind of skilled labour is, or will be, available to the entrepreneurs who are contemplating industrial development or are engaged in service industries. The process of selecting candidates for skilled Jobs is full of flaws, as it attaches inordinate amount of importance to certificates.

The manpower forecast of the National Planning Commission does not take the private sector into account, mentioning only the likely production of the colleges and universities. Even the limited manpower, produced in accordance with it, is not fully absorbed. The commodity-wise estimation does not, as it should, include a practical analysis of the cost factor, creating a discrepancy between estimation and the actual situation obtaining in the Job market. Since skill-building programmes are launched without first determining manpower requirements, it should cause no wonder, if there is no practical relationship between the supply and demand of the skilled manpower, or between the type of training and the nature of work.

The industries are not involved with the training programs that are designed to increase production and productivity. In fact, the government has no policy on how to encourage and what facilities should be given to participating industries. And no attempt has so far been made to set up even rudimentary relations between the training programmes and industries.

**The Place of Technical and Vocational Education in the National Main Stream:**
Until now the place of technical and vocational education in the national mainstream has not been clearly demarcated. Training institutions, geared up to produce basic, low-level and middle-level manpower, are scattered all over the country, and they are conducting programmes in their own ways.

Although Tribhuban University has manpower production policies and programmes, the lesser agencies do not know where they stand. In almost all the countries of the world, including the SAARC countries, definitive values, norms and processes of technical education have already been evolved. In our country, however, skill-based occupations are despised, and their practitioners are in a state of confusion. It
is, therefore, high time that the structure of technical and vocational education be reviewed to map out its place in the main stream of education, and to identify its similarities and dissimilarities with formal, informal and higher education.

At present there is a wide variety of agencies, Council for Technical Education and Vocational Training involved with technical education and vocational training. Chief among them are the which operates a number of technical schools and training centres. Tribhuban University has its technical institutes and trade programmes. Training centres are also functioning under the Department of Cottage and Rural Industry. Next, we have the labour supply centre and other training centres under the Department of Labour. Other governmental agencies that have specialized training centres of their own are the Department of Agriculture, Department of Tourism, and the Ministries and Departments of Communication, Land Reform and Management, Forest and Environment, Local Development, and Health. Besides, there are several training courses, conducted in the private sector including voluntary societies, associations and clubs.
Table 1

Enrolment in Training Programmes

<table>
<thead>
<tr>
<th>Agencies</th>
<th>Technicians</th>
<th>T.S.L.C.</th>
<th>Short-Term Training</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech.Schools</td>
<td>288</td>
<td>1,188</td>
<td>288</td>
<td>1,704</td>
</tr>
<tr>
<td>Tech.Institutes,TU</td>
<td>3,306</td>
<td>980</td>
<td>160</td>
<td>4,346</td>
</tr>
<tr>
<td>Dept of Cott.Industry</td>
<td>63</td>
<td>200</td>
<td>1,130</td>
<td>1,893</td>
</tr>
<tr>
<td>Labour Supp.Centres</td>
<td></td>
<td>1,400</td>
<td></td>
<td>1,400</td>
</tr>
</tbody>
</table>

Several other agencies of Nepal have launched short-term training courses from time to time. They include the Hotel Management and Tourism Training Centre, Telecommunication Training Centre, National Computer Centre, Women's Training Centre, Small Vocation Promotion Project, Nepal Electricity Authority Training Division, Survey Training Division, Ministry of Health Training Division, and other governmental and non-governmental organizations, including the Banks.

Curriculum and Educational Material: There has been no uniformity in the training programmes, curricula, duration, quality, recognition and certification of the training courses launched by the above agencies. These programmes may be categorized as basic-level, low-level and middle-level: and the professions and vocations they cover are general mechanics, plumbers, sanitary fitters, electricians, agricultural junior technical assistants, livestock junior technical assistants, construction sub-overseers, midwives, assistant nurses, office workers, leather craftsmen, automobile mechanics, tailors, wood workers, carpet weavers, draughtsmen, trekking guides, front office managers, restaurant cap’ airs, cooks, floor supervisors, printers, binders, typists, computer operators, airconditioner mechanics, assistant nurse midwives, surveyors, hotel managers, health assistants, keyboard operators, and so on and so forth.

The duration of training and recognition of the same vocation vary from agency to agency. For example, the electrician training courses vary in duration from 6 months to 3 years. Whatever the period of training, they are labelled as electricians, and some are recognized and others are not. Some courses prescribe entrance prerequisites, others do not.

There are also instances where the same technician is known by different names, for
example, plumber mechanic and plumber fitter. As no survey has been undertaken of the vocations of the country, training and job requirement have often been at variance. The training agencies differ from one another in the kind and quantity of equipment at their disposal. Some have well-equipped workshops, others have a limited range of machines, equipment and accessories, while still others have no facilities worth the name.

The most serious lacuna is in the field of inspection and evaluation. Most of the training institutes or centres have no mechanism to see whether the equipment are put to proper use, whether the training is effective and cost-efficient, or whether they are of acceptable standards.

**Management Process:** The success or otherwise of any programme hinges on its management side. It has been found that the management aspect of the technical and vocational education currently under way is not very clear. In the first place, it differs from programme to programme. If the management of the programmes, launched under the universities, is of one kind, its nature is completely different when they are handled by the Council for Technical Education and Vocational Training. The Ministries and other agencies have working styles of their own, which bear no resemblance to the former. The weaknesses of the management may be listed as non-definition of the area of competence, haphazard organization at charts, lack of even minimum autonomy of the agencies, centralization of administration, lack of clear job descriptions, non-compliance with job descriptions, where they exist, and uncertainty and impracticality of performance rating criteria.

**Legal Base:** Many agencies are involved in carrying out the same functions, but there is no legislation, defining which of them is to assume what degree of responsibility for what kind of work. For example, there is no legal provision, drawing the line between the types and levels of courses to be conducted by the university and the Ministries concerned, and what laws there are, are not consistent with one another. To give an example, it was laid down in June 1983 that the Ministry of Labour and Social Welfare was to conduct the industrial trainers training programme, and five years later on November 13, 1988 a law was enacted, assigning the same job to the for Council Technical Education and Vocational Training.

Similarly, the terms of employment of the training staff, carrying out the same
functions, are not clearly defined. Some of them have been working for a long time as temporary employees. This problem exists in more acute form in the training units, functioning within various Ministries. The case of the training staff of the Labour Supply Centre under the Ministry of Labour and Social welfare, and the Local Development of the Ministry of Local Development, may be cited as a glaring example. The absence of clear-cut rules and by-laws, the non-existence of reliable evaluation procedure to guarantee the timely promotion of trainers, and the lack of basic facilities like medical allowance, gratuity, pension and provident fund have led to frustration. What facilities they have are not equal to those which are enjoyed by the people with similar qualifications and skills, working elsewhere. They do not know what they will get and what they will be in the future. Under the circumstances, is there anything to wonder about, if they lose faith in their profession, and take no interest in their work?

Trainers Training: Trainers are the chief catalysts who produce quality manpower by providing suitable technical and vocational education and training. The quality of the output of any training programme will never be up to the mark, unless the trainers themselves are competent, well-trained and skilful. Another important factor is the relevance and regularity of the training courses.

In most cases, trainers get training opportunities only if the training programme assumes the guise of a project. There are no provisions for pre-service, in-service and functional trainings. Even though there are provisions for such trainings, the training agency suffers from the lack of appropriate trainers to give them practical shape. Although Sanothimi Campus was specially set up to give training to secondary vocational school teachers only, its resources are too limited to meet the requirements of the vocational schools now in operation, let alone the needs of such institutions like Balaju Technical Training Centre, Thapathali Campus, Western Zonal Campus, etc. Meanwhile, the policy concerning the vocational education to be imparted through secondary schools underwent a sea change, leaving Sanothimi Campus high and dry. There are no provisions for training the administrative personnel on a regular basis in the interest of effective implementation of training programmes under their dynamic leadership and wholehearted cooperation. Members of the administrative staff of some agencies are given training to a limited extent within the project period only. Such are the
problems, besetting the trainer training programme.

**Policy and Position of Resource Mobilization:** The tradition of public investment in technical education and vocational training programmes have been quite commendable. But the industries have been trailing far behind. In the industrialized and newly industrialized countries the industries themselves bear the bulk of the outlay on technical education and vocational programmes, leaving only a small part of it to the government.

In Nepal, however, training centres are set up in most cases by the government with foreign grants or loan assistance. During the formative years the government also comes forward with a heavy investment programme. Once the project is commissioned, it becomes apparent that the government grants or budget is not adequate enough to repair and maintain the buildings, machinery and accessories.

Generally, during the project stage, the machinery and tools, required for the training centres, are imported from overseas out of the funds made available by the donor countries. Later, when the projects are handed over to the government, it will be discovered all of a sudden that there is no longer any money to import the hardwares, and that they are not locally available. In some cases work has been hampered not because there are no machines or tools, but because the educational materials have gone out of stock.

Instead of attracting the trainees by the relevance of the training course to the opportunities of employment, they are offered the inducement of scholarships, free tuitions, free accommodations with full board, a tradition, which is difficult to sustain. The same observation applies to short-term trainings, too.

The physical facilities available in the training centres are not up to the capacity. Sure of getting salaries every month, the training staff have no urge to generate income by harnessing the internal resources. By their very nature, technical education and vocational training are costly affairs, requiring a good deal of resources. It is exemplified by the fact that the average cost of 33 vocational programmes in Asia, the Pacific region, and African countries is worked out at US$ 2,315 per student per annum, whereas in Nepal the annual expenditure of the Butwal Technical Institute per student is US$ 2,536, which is 15 times more than
the per capita income of a Nepalese citizen.

3. Main Problems and Issues

Social Attitude: The general view that low- and medium-level technical/vocational education/training is a second-rate thing, that a white-colour job is vastly superior to manual work, and that occupations having anything to do with cloth, leather or iron is the ‘prerogative’ of a certain caste is a proof that the society holds technical education and vocational training in low esteem, and that it militates against employment, development works, manpower production, and industrial policies of His Majesty's Government.

Educational Structure:

1. The national educational structure does not make a clear distinction between formal education, informal education, technical education, vocational training, and skill test. Education is conceived of as a scale, ranging from class 1 to the university level: other forms of education are regarded as something equivalent to them.

2. The entire educational structure has been functioning on an inadequate legal base, under weak management, and through ill-defined educational and training organizations.

3. The task of centering technical education and vocational training on the targeted groups has proved a difficult row to hoe.

4. The path of devising skill-based curricula, suited to employment opportunities, procuring machinery and tools, and keeping them in a state of good repair after procurement, updating and revising the text-books, and maintaining the continuity of technical education and vocational training, has been strewn with many obstacles.

5. Coordination, standardization and certification have been posing numerous awkward questions and challenges.

6. The most nerve-racking job has been to overcome financial constraints and the shortage of competent and trained manpower, and to put what is available to effective use.
Identification of Training Needs: No attempt has been made, as it should, to identify what skill should be imparted to young men and women who form the bulk of the population, what jobs and vocations they should be trained for, what occupations are currently on offer in the country, what kind of knowledge and skill should be instilled in them to ensure industrial and rural prosperity, and how a package of curriculum and training with relevance to job opportunities can be evolved. Only on the basis of this knowledge can the economic development of the country be pushed forward. Whatever the viewpoint, whether economic or otherwise, there is no denying the fact that a close link should be established between skill and vocation. Or the skill will be wasted.

The three important questions are whom to teach, what to teach, and how to teach. If training courses are conducted without answering these questions in a satisfactory manner, there will be no harmony between the output and social requirement, giving rise to the worrying phenomenon of educated unemployment.

4. Recommendations

After reviewing the present status of technical education and vocational training programmes, and after briefly analyzing the problems existing in this area, the following recommendations have been put forward for implementation.

Objectives: Technical education and vocational training should be given in the form of a basic infrastructure to ensure to all the enjoyment of the right to work and education in the present national context: to fulfil the Constitutional aspiration to infuse requisite knowledge, skills and the spirit among the citizens; to safeguard the democracy, tranquillity and culture of the country; to foster modern civilization along with socio-economic advancement; and to promote skill, attitudes, individuality, knowledge and understanding necessary for the vocations, professions, jobs and services in different fields of human activity.

Scope: Technical and vocational education should be broadly interpreted to include all the long-term or short-term, formal or non-formal technical education and vocational training, imparted by any of the governmental or non-governmental agencies, and social/cultural associations or organizations. Also, it implies the scientific and technological skills, attitudes, individuality, understanding and
knowledge acquired by a person in the course of frequent, practical exposure to any profession or activity in his socio-economic life. Besides, the vocational subjects taught in general secondary schools, the preparations made for entry into any profession or vocation, the basic livelihood skills imparted to the literate children, and young men and women, the skill-oriented education or training given to the adult and the old for enabling them to earn a living, the basic and middle-level skills given for use in such sectors like industry, agriculture, tourism and commerce, trainings imparted by mobile units, and skills and trainings imparted to the physically and mentally disabled—all these skill-building or skill-boosting measures also come within the purview of technical education and vocational training.

The following should be the objectives of technical education and vocational training.

(a) To better the livelihood of the common man, and to develop skilled manpower for economic advancement:

(b) To develop the capabilities, talents and skills of the individual in order that he may contribute to the process of democratization and national reconstruction together with the social, economic and cultural uplift of the nation:

(c) To enable the trainees to grasp the likely impact of scientific and technological breakthroughs and transformations on the human civilization, society, politics and environment:

(d) To build up capabilities required for leadership roles in community works and group activities: and,

(e) To boost up skilled human resource as an inexhaustible source of economic affluence.

Policy Directives

2. Technical and vocational education should have four strata: basic, middle-level, upper-middle-level and high-level.
(a) At the basic level ordinary literate should be taught basic skills necessary for earning a living and raising the standard of life by means of both formal and non-formal education:

(b) At the second level the ordinary SLC pass individuals should be given short-term modular courses, regular training courses, apprenticeship trainings, and skills designed to fit them out for some particular vocations by means of both formal and non-formal education.

(c) At the upper-middle-level should be produced technicians and tradesmen of different categories to meet the trained manpower requirements of industries, set up in the public and private sectors, private undertakings and cottage industries, and apprenticeship training should be introduced phasewise: and

(d) The high-level should occupy itself with the production of senior technicians.

(3) Technical education and vocational trainings, should be given a definite place in the main stream of education.

(4) Technical education and vocational trainings should be job-oriented, and be closely linked with job market. For this purpose, their structure should be flexible and reliable in order to make them widely accessible in the form of formal and non-formal education.

(5) Technical education and vocational training programmes should be so designed as to produce the manpower required for the public and private industrial enterprises, rural and community development projects, and small and cottage industries.

10) Technical education and vocational training programmes should adopt the policy of having a spectrum wide enough to encompass programmes from the basic level to the trainers training level. Technical and vocational education units at the regional level should study the local requirements and employment opportunities, and devise curriculums and initiate training courses accordingly. Each regional unit should function as a resource centre for local-level vocational training programmes.
11) Technical education and vocational training programmes above the basic level should double its present capacity to train 9,342 persons per year within the next five years, and treble it within the next ten years, if required.

12) While expanding the training capacity of existing institutions, additional technical institutes, or training centres, should be developed on a regional basis. Establishment of new ones, however, should be taken in hand only after analyzing the local needs and on the basis of feasibility studies.

13) Subjects with relevance to women should be included in the programmes to step up their participation. In the training programmes now under way, or to be launched later, a quota should be set aside for the admission of women.

14) On the recommendation of the Council for Technical Education and Vocational Training, the national agency for the coordination of training programmes, customs duties and other taxes on the machinery and tools, and similar training equipment imported for the use of training centres and polytechnical institutes, should be exempted. A legislation to that effect should be enacted. They should also be enabled to receive foreign aid and bank loans.

15) Training institutes should have full economic and administrative autonomy, with the Council for Technical Education and Vocational Training stepping in control the quality of the output and to establish coordination among them.

16) In fulfilment of its institutional responsibility for quality control and coordination, the Technical Education and Vocational Training Council should develop curricula, standardize the, training, mount inspections, conduct skill tests, classify the institutes, certify the achievements, and provide technical/vocational consultancies.

17) A national policy should be framed under the guidance of the National Planning Commission to undertake research works, to identify the manpower requirements, to classify the professions/vocations, to draw up the job description of vocational occupations, and to launch skill-oriented trainings accordingly.
Educational Structure

18) Until now technical education and vocational training programmes have been assigned no clear-cut position in the educational structure. For this reason the training programmes are either compared with the formal degrees of the university, or as something parallel to them. From now on, they should be categorized according to the formats, as given below in Tables 2 and 3.
Table 2
Structure of Technical Education and Vocational Training

<table>
<thead>
<tr>
<th>Standard</th>
<th>Type of Training</th>
<th>Skill Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Apprenticeship</td>
<td>Polytechnic</td>
</tr>
<tr>
<td>Diploma</td>
<td>S/Technician</td>
<td>S/Technician</td>
</tr>
<tr>
<td>S Technical SLC</td>
<td>Technician</td>
<td>Technician</td>
</tr>
<tr>
<td>Technical SLC</td>
<td>J/Technician</td>
<td>J/Technician</td>
</tr>
<tr>
<td>Participation</td>
<td>Basic Skill</td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>training</td>
<td></td>
</tr>
</tbody>
</table>

Note:

- Admission open to those passing SLC in polytechnic, Technical SLC or equivalent.
- Admission open to class 10 students of the Junior Technician Training, conducted by the Technical Schools.
- Basis of entry, duration of training, experience, age and minimum qualification for each subject or level of training will be as prescribed.
Table 3
Organizational Chart of Technical Education and Vocational Training

<table>
<thead>
<tr>
<th>Technical Education and Vocational Training Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of Curricula, Standardization &amp; Inspection</td>
</tr>
</tbody>
</table>

Agencies to Run the Training Courses

a) Training schools and training programmes conducted by Council for the Technical Education Vocational Training.

b) Under graduate level trade technician technical courses conducted by the university.

c) Training courses conducted by different Ministries.

d) Training courses conducted by community organizations.

e) Training courses conducted by non-governmental organizations (NGOs).

f) Technical schools and training programmes operated in the private sector.

Leading features of the proposed educational structure

a) Skill testing system forms an integral part of technical education and vocational programmes. This arrangement will provide the technicians and professionals who have acquired skill through formal and non-formal means with opportunities for career development. Those who have certificates to prove their skills will stand a better chance for promotion in the same profession or for transfer to another profession of the same nature.

b) Admission to any level of modular training is no longer restricted to those who have passed such-and-such class. Specific, basis has been worked out for admission to each level in addition to minimum qualification, age, etc. Entrance test will be carried out for each level, and only those who pass it will be enrolled. The syllabus for each level has been made self-terminating. Under this arrangement, persons completing one level, will not be automatically qualified to move on to the next higher level. They will have to sit for and pass the entrance test at each level.

19) Any person, wishing to join any level of the training, should be allowed to appear in the entrance test, no matter whether he comes from the formal, or
non-formal, or skill test channel, or from within the structure of the technical education and vocational training structure itself.

20) As there is a provision for setting the age limit, taking into account the nature of the syllabus prescribed for each level of training, the admission policy should be flexible enough to give vocational training to persons belonging to all age brackets.

**Organization and Management**

21) The Council for Technical Education and Vocational Training I should be developed as an effective agency at the national level to certify, coordinate and control the quality of technical education and vocational training programmes now under way or in the offing.

22) The Council for Technical Education and Vocational Training should certify, coordinate, standardize and control the quality of all the training programmes being conducted now or to be conducted later, by different agencies within the country.

23) The existing legislations and the rules framed under them, should be amended and strengthened to bring basic and middle-level technical manpower within the jurisdiction of the Council for Technical Education and Vocational Training. The diploma campuses of Pulchok and Thapathali, where SLC pass candidates are admitted on the basis of qualification and entrance test, and the like, should be transformed into polytechnic institutes.

24) Boards of Directors should be constituted to handle the polytechnic and trade programmes, now operating under Tribhuvan University. Their terms of employment should be clearly specified. They should be invested with a requisite amount of autonomy. The trainer-teachers should be provided with opportunities for career development and training in order to make their jobs attractive. The responsibility for the coordination, certification and quality control of these polytechnic institutes and trade programmes should be shifted phase-wise from Tribhuvan University to the Council for Technical Education and Vocational Training within the next ten years.
25) A trainer-trainee ratio should be fixed for each technical education and vocational training programme, and the work-load and job-description of each trainer should also be spelt out.

26) A practical and effective performance evaluation system should be evolved for the training, study, promotion, and reward and punishment of the trainers.

Legal Basis

27) The jurisdiction, status and limitation of the agencies, conducting training courses at the national level, should be laid down by law. For example, the existing law should be amended to invest the Council for Technical Education and Vocational Training with more functions, wide scope, and higher status. Similarly, the functions and scopes of other educational/training institutes should also be defined in clear terms, followed by the formulation and enforcement of the rules and by-laws for each individual agency.

28) Rules should be framed to facilitate the establishment of training centres, technical schools, or polytechnic institutes, whether governmental, semi-governmental or private.

Curriculi and Text-books

29) The curriculi and training materials of the basic training should be prepared by the centre in cooperation with experts or technicians, with the participation of the local units, and in accordance with the local requirements. The curriculi and training materials of the middle-level and upper-middle-level should also take account of the local needs, and the conditions prevailing in the local job market.

30) The Council for Technical Education and Vocational Training should be required to coordinate the training programmes, to prepare and standardize the curricula of all the trainings above the basic level. It should also be entrusted with the task of amending and updating the type of training, standard of curricula, and so on, in the light of studies, investigations, follow-ups are undertaken from time to time.
31) As the occupations, now existing in the country have neither been listed nor analyzed, it has not been possible to determine with certainty the kind of skill needed for any particular profession, and the kind of training that would help enhance it. Under the circumstances, the first thing to do will be to prepare a list of occupations under the joint auspices of the National Planning Commission and the Council for Technical Education and Vocational Training, followed by the drawing up of curricula to suit each of them.

32) In the context of the quick changes taking place in technology, the curriculum for each subject should be followed up and revised on a regular basis.

33) While preparing the curricula, the employers and private industries should be included, priority should be given to the development of entrepreneurship, and attention should be focused on the particular needs of the womenfolk as well.

**Coordination, Standardization and Certification**

34) The Council for Technical Education and Vocational Training I should coordinate all kinds of technical education and vocational training programmes including polytechnic apprenticeships, except the basic skill training, which should be coordinated by the district- and village-level offices of the Ministries concerned.

35) Coordination should mean a, to grant approval for conducting training programmes; h. to maintain the record of such activities at the national level; c. to standardize curricula and technical workshops; d. to fix the minimum qualification and training of trainers; e. to advise the agencies concerned on enlisting the cooperation of foreign donors for grant assistance: f. to study the terms of employment and other facilities of the trainers engaged in training programmes, and make recommendations and, g. to map out the jurisdiction of each training institute.

36) Arrangement for certification should be made, after deciding what type of recognition and certificate should be given to which level of training.

37) The National Skill Testing Committee under the Council for Technical Education and Vocational Training should be reinforced and built up as an
autonomous body to extend the scope of skill testing, and to award certificates and licences for the maintenance of the national standard.

38) An appropriate agency should be deployed in an institutionalized form to identify the manpower and training requirements under the policy guidance of the National Planning Commission and under the aegis of the Council for Technical Education and Vocational Training with the aim of chalking out technical training programmes required for expanding the scope of skill testing and for ensuring industrial and rural development. In other words, supply of the skilled manpower of different levels should be guided by demand.

Career Development

39) Basically, the biggest problem, besetting the basic and middle-level manpower, is career development. Its solution depends on how much the policies, relating to training, industry and employment can be harmonized. The current regulations in connection with the classification of services for the entry of different categories of technicians, minimum qualification for entry, and promotion should be completely overhauled. There should be separate provisions for the technical services of the public and private industries, corporations, projects and companies; and fundamental changes should be made in the general principles of the Public Service Commission.

40) The following steps should be taken for the career development of the persons who have received skill-based technical and vocational training, or who have been awarded certificates for passing the practical examinations under the skin testing system.

   a) To divide the posts in all agencies (including public, private and corporate bodies) into categories from 1 to 6;

   b) To appoint helpers and other unskilled workers with basic training to level 1, and to promote them to level 2 on the completion of at least 2 years;

   c) To appoint non-gazetted officers or level 3 assistants who have passed 1 level of skill testing, or who have received a training recognized under the modular course, to level 3;

   d) To appoint Junior Technicians, or Technical SLC certificate holders, or
persons who have received Apprenticeship training of 2 to 3 years, or who have received 2-year training or experience under the modular course, or who have received level 2 certificate of skill testing, to level 4;

e) To appoint middle-level technicians who have received certificates of the Technician level, or who have passed the level 3 examination under skill testing, or who received Proficiency certificates or equivalent polytechnical diplomas, to level 5;

f) To appoint technicians who have received technician certificates or polytechnic diplomas with four years of experience and 1-year supervisory training, or who are certified to have passed level 4 examination under skill testing, to senior technician posts of level 6:

g) To fix the minimum service of two years for promotion from level one to level 2; three years for promotion from level 2 to level 3; three years for promotion from level 3 to level 4; four year for promotion from level 4 to level 5; and four years with one year in the supervisory post for promotion from level 5 to level 6.

h) To promote from level 6 (equivalent to Assistant Engineer) to next higher levels or classes, in keeping with the years of service prescribed under the current rules, but with greater weightage for skill-based performance, and to waive the requirement of higher qualification;

i) For service and promotion the present obligatory basis of academic degree is impractical and unscientific, so far as the present condition of technical and vocational areas of service are concerned. The existing laws and rules should, therefore, be amended to take account of the technical training and non-formal education, skill training, and experience gathered in the technical field of certain duration.

j) The general principles of the Public Service Commission, employment policy, industrial policy and educational and training policies should be amended and coordinated to bring them in line with the foregoing points (from a. to j.).

**Mobilization of Economic Resources**

41) The following steps are recommended to widen the scope of technical education and vocational training and to bring them within the reach of all;

a) To harness the resources of villages and districts for basic skill training, and to provide technical support from the centre together with some financial grants:

b) To continue government grants to the technical schools, campuses and other training institutes that are in operation now;

c) To oblige industrial undertakings to contribute to the training
d) To maintain the present level of the technical programmes of the technical schools and The Council for Technical Education and Vocational Training, to continue the provision of scholarships and interest-free loans to the technical schools of the remote areas, and to limit scholarship facilities to poor and talented students only in the case of other areas;

e) To have, where possible, a production programme for each polytechnic school and training centre, and to pump back what is earned from it to meet its operational expenses without affecting the learning process;

f) To provide without fail for the training of basic and middle-level technical manpower while executing any big projects;

g) To expand bi-lateral and multi-lateral technical cooperation for technology transfer and for essential, though costly, training programmes;

h) To repeal the Acts that are inconsistent with the coordinatory roles and other functions of the Council for Technical Education and Vocational Training, if any;

i) To organize a series of short-term training programmes calculated to develop technical education as a means of fulfilling less costly community requirements, and to conduct regular courses in the technical schools in two shifts, depending on their conditions;

j) To require the Council for Technical Education and Vocational Training to activate production units in technical schools in support of the aim of building up entrepreneurs wherever possible and;

k) To oblige the technical schools to deliver requisite services in the neighborhood on payment of fees, and to distribute a certain percentage of the earning to the teachers and students involved in such jobs.

42) The trainers should be trained within the country on a regular basis, as they form the backbone of the training programme.

43) The training of the technical trainers should be provided with appropriate trainings on two subjects—skill in the subject concerned and training methodology.

44) Managers and other officials, connected with the management and administration of technical and vocational training should be trained on a regular basis.
45) The duration of such trainings should vary from 3 months to 2 years, depending on the nature, level and type of subjects.

46) Recently established under the Council for Technical Education and Vocational Training, the Technical Trainers Training Centre should be evolved into an institute, capable of imparting the above training.

47) Sanothimi Campus under Tribhuban University should be brought up to function as an institute for conferring vocational training on technical schools.

**Manpower for Industrial Development**

48) The manpower produced should be in harmony with the industries, operating under the governmental, semi-governmental and private ownership.

49) There should be a provision for the labour market information to give a true picture of the jobs available to skilled and semiskilled workers and other employees.

50) Curricula should be devised, types of training selected and policies framed to work out intimate relationship between technical and vocational training programmes and industries, and to make the former contribute to the productivity of the latter.
8. TEACHER TRAINING

1. Background

Teachers training may be said to have got off the ground for the first time in 1947, with the establishment of the Basic Teachers' Training Centre under the Basic Education Scheme. Coming into existence at a time when the entire activities of the Rana Regime were looked down upon and deeply resented, it withered away for lack of popular support and cooperation, and it died a natural death after the Revolution of 1950/51.

Following the rise of democracy in 1951, a feeling gained ground that the all-round development of the country could not even be dreamed of without education. Accordingly, the Basic Trainers' Training Centre was converted into the Nepal National Education Planning Commission in 1956, which submitted a comprehensive education scheme after two years, taking into account all aspects of the kind of education which the democratic Nepal stood in need of.

As recommended by the Commission, a College of Education was established in 1957, to conduct a post-SLC 4-year B.Ed. course. It also launched a 10-month training programme for primary school teachers. Both of those programmes provided the teachers with opportunities to have in-service training. The College laid special emphasis on the production of trained teachers for the newly-opened schools.

Apart from the 4-year B.Ed. course, there was a one-year B.Ed. programme, conducted for the benefit of graduates in other subjects as in-service or pre-service training. For the training of primary school teachers, mobile units were dispatched to various districts, besides Kathmandu. In this way, thousands of old and new teachers of the country received trainings. Schools were opened to bring the light of education to the farthest corners of the Kingdom.

Later, as recommended by the Comprehensive National Education Committee, formed in 1959, permanent teachers' training centres were set up in various districts, and mobile units were discontinued or disbanded. Under these schemes of teachers' training 700 secondary school teachers and 9,000 primary school teachers were produced by 1971.
In the wake of the establishment of Tribhuban University in 1959, the College of Education formed a part of it, and almost immediately afterwards its 4-year graduate course was broken up into two parts—a 2-year I.Ed., and another two years of B.Ed. course, open only to those who had passed the former. The I.Ed. course was designed to produce teachers for lower secondary schools, and the B.Ed. course for secondary schools. An extension centre of the College of Education was built in Birgunj also.

After the introduction of the National Education System Plan in 1971, a big change swept over the teacher training programme. Permanence of tenure as a teacher was made conditional upon the possession of a requisite teacher training certificate. The pay-scales of trained and untrained teachers were differentiated. The former's pay-scale was revised to equate it with other professionals having the same degree. That had the effect of producing a 'run' on the teachers' training programmes.

The need was for a comprehensive and far-reaching plan and programme for teacher training to produce teachers of different categories along with teacher trainers, education administrators, inspectors etc. required for the country. Accordingly, an Institute of Pedagogy was established under Tribhuban University by merging the College of Education, Primary School Teachers' Training Centres, National Vocational Training Centre, English Language Training Centre and the like. This Institute started, inter alia, the M.Ed. course to produce teacher trainers and teacher technologists.

The semester system, then in force, was replaced by the annual system in 1982. Earlier in 1980 His Majesty's Government amended the Education Act for the seventh time, making teacher training not compulsory for becoming a permanent teacher, and reducing the importance. Various programmes conducted by the Institute of Pedagogy for the training of primary teachers, were dropped. At that point of time the Ministry of Education and Culture stepped in to run new short-term courses for the in-service training of the primary teachers in the name of various projects for example, educational project for village development in the Seti zone, primary education project, education-by-radio teacher training, etc.

A policy was adopted under which training projects for primary teachers and in-service training for other categories of teachers were taken in hand by the Ministry.
of Education and Culture leaving the Institute of Education of Tribhuvan University with the task of managing and conducting degree-based long-term trainings. Similarly, around the year 1986, the implementation of the science education project was initiated to increase the output of science, mathematics and the English-language teachers. Under the same project the incumbent teachers of those subjects were put through a short-term refresher course.

Around the year 1986 the recommendations of the Royal Commission for Higher Education were progressively enforced. The Institute of Education was converted into a faculty with the authority to deal with general education, not technical education. In some places outside the Kathmandu valley, the campuses offering Education courses, were allowed to carry on their activities as components of multi-purpose campuses. Such campuses were brought under the wings of the central administration of Tribhuvan University, instead of allowing them to function under the Dean of the Institute of Education. As a result, they were gradually alienated from the Institute of Education and the latter's coordinating role was weakened more and more. At the same time, educational committees on the teaching of various subjects, which had been functioning independently of each other, were combined under six central teaching departments, abandoning the teacher training programme in the middle of the road with no clear sense of direction.

2. Present Situation

Teacher teaching and training programmes are handled by two agencies. The Ministry of Education and Culture is responsible for the in-service training of primary and secondary teachers, especially for the short-term training programmes in science and mathematics. The long-term academic programmes in connection with I.Ed., B.Ed. and M.Ed. degrees together with women's training courses are taken in hand by various campuses under the Faculty of Education.

Primary Teacher Training

The present training programmes under the Ministry of Education and Culture are as follows:

a) The 150-hour basic training programme initiated by the Regional Education Directorates since 1987.
b) The primary teacher training started under the Seti project since 1942.

c) The 150-hour programmes, or three 12-day programmes, run by the primary education project since 1985.


The main problems associated with the above programmes are

a) Lack of coordination and uniformity

b) Want of coordination between the theory and practice of education, and nonexistence of a suitable class-room atmosphere to put what has been learnt into practice, although the training is very intensive.

c) The conduct of programmes with special incentives during the project period which cannot be kept up once the project is over, causing disenchantment at the actual teaching/learning stage.

d) The very low volume of participation of the trainers who have specialized knowledge of primary education, although all of them are experienced graduates.

e) The lack of uniformity in the training programmes, because they are conducted by trainers who have differing educational and training backgrounds.

Programmes conducted by the Faculty of Education: At present 10-month in-service women's training programmes are in operation in the campuses in Dhankuta, Birgunj, Pokhara, Surkhet and Jumla under the Faculty of Education of Tribhuvan University. That is all. The 150-hour programme under the aegis of the Primary Education Training Committee has gone out of operation.

Although trained teachers are in great demand for quality education in the country, the primary teacher training programme, operated by the Institute of Education, has lost its momentum, creating a great void in the supply of trained teachers. Some of the factors contributing to the situation are

1) That since 1979 training is no longer compulsory to become a permanent primary school teacher, resulting in the lessening of the importance of training, and the closing down of the training programmes under the Faculty of Education one after the other;
2) That the Ministry of Education and Culture has decided to take over the primary teacher training programmes;

3) That there was no insistence on the part of the Faculty of Education to keep the primary teacher training programmes under the management of Tribhuban University, and that the education-by-radio programme was also shifted to the Ministry of Education and Culture: and.

4) That Tribhuban University itself has assigned low priority to the training programme.

**Secondary Teacher Training**

Basically, two agencies are involved with the training of secondary teachers: the Faculty of Education of Tribhuban University, which conducts long-term and degree-based trainings; and various units of the Ministry of Education and Culture, which carry out short-term in-service trainings. Most of the students join the I.Ed. courses after passing SLC, and go ahead till they complete graduate or post-graduate courses.

In Nepal a person need not have training to take up the teaching profession. For this reason most of the incumbent teachers are untrained, and their first exposure training is the pre-service teacher training programme conducted by Tribhuban University. Previously the Ministry of Education and Culture used to fix a quota for this purpose, which was dropped later. However, some teachers join the course at their own expense, taking long leave from their schools.

In-service teacher training in the Nepalese context signifies short-term workshop programmes designed to acquaint the incumbent teachers with the curricula of different units, to enlighten them on the rules, and to familiarize them with the teaching problems and new methodologies. All the teachers, both trained and untrained, are required to participate in such workshops, preference being given to the latter. Incumbent teachers are, therefore, exposed to several trainings. If some of them have received teacher training with degrees, most of them have at least had the benefit of short-term introductory training courses.

The Ministry of Education and Culture has been conducting short-term introductory
and subject-wise in-service trainings through various agencies--Regional Education Directorates, District Education Inspectorates. Centre for the Development of Curricula, Text-books and Inspection, and the Science Education Project.

**Current Degree-based Programmes**

<table>
<thead>
<tr>
<th>(a) Tribhuban University Campuses</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Education Dept., Kirtipur</td>
<td>Graduate, Post-graduate Doctorate</td>
</tr>
<tr>
<td>Mahendra-Ratna Campus, Ilam</td>
<td>Proficiency Certificate (P. C.)</td>
</tr>
<tr>
<td>Multi-purpose Campus, Dhankuta</td>
<td>P. C., Women Teacher Training, Graduate</td>
</tr>
<tr>
<td>Multi-purpose Campus, Siraha</td>
<td>P.C., Graduate</td>
</tr>
<tr>
<td>Thakurram Multi-purpose Campus, Birgunj</td>
<td>P. C.,Graduate</td>
</tr>
<tr>
<td>Mahendra-Ratna Campus, Tahachal</td>
<td>P. C, Graduate, post Graduate</td>
</tr>
<tr>
<td>Sanothimi Campus, Bhaktpur</td>
<td>P.C.,Graduate</td>
</tr>
<tr>
<td>Gorkha Campus, Gorkha</td>
<td>P. C,Graduate</td>
</tr>
<tr>
<td>Prithvinarayan Campus, Pokhara</td>
<td>P. C., Women Teacher Training, Graduate</td>
</tr>
<tr>
<td>Butwal Campus, Butwal</td>
<td>P. C,Graduate</td>
</tr>
<tr>
<td>Birendra Campus, Surkhet</td>
<td>P. C., Women Teacher Training, Graduate</td>
</tr>
<tr>
<td>Jumla Campus, Jumla</td>
<td>P. C., Women Teacher Training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(b) Private Campuses</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathmandu Education Campus, Kathmandu,</td>
<td>Graduate</td>
</tr>
<tr>
<td>Lalit Kala Education Campus, Lalitpur</td>
<td>P. C, Graduate</td>
</tr>
</tbody>
</table>

Besides, degree-based teacher training courses are available in Sharada Multi-purpose Campus, Bhaktpur; Chaitannya Multi-purpose Campus, Banepa; Saptagandaki Multi-purpose Campus, Bharatpur; and B.P. Multi-purpose Campus, Janakpur.

The Ministry of Education and Culture initiated the Science Education Project in 1984/85 to raise the teaching standards of secondary school teachers, with funding from the Asian Development Bank and UNDP. Cooperation was also received from the Overseas Development Agency, the UK, for the training of English teachers, participating in this project. It included provisions for training the school administrators and inspectors, connected with science education.

Under this project 2,000 in-service science and mathematics teachers, belonging to 700 schools, received one-month trainings twice. 1,800 of them were science teachers, and 200 mathematics teachers. Similarly, 1,050 science teachers of
various secondary schools under the Faculty of Education of Tribhuvan University were trained in the art of science teaching in cooperation with this project. It has also brought out training manuals for in-service training, and teachers' manuals for teaching science from class 6 to 10.

Some of the Reasons for the Ineffectiveness of Degree-based Programmes

1) Students, passing SLC with good marks, have not been attracted to the teaching profession. They go in for study in the technical institutes. Only those who are unable to gain admission to them drift into the Faculty of Education. Persons, belonging to the teaching profession, have very little chance for making money and are forced to live a plain life, no matter how hard they work.

2) Although the duration of the proficiency certificate, graduate and postgraduate courses is of two years each, it takes three years on average for various reasons. In other words, a person has to devote 6 or 7 years after
3) passing the SLC to become a graduate and be qualified to teach in the school, making it difficult to meet the huge demand for trained teachers.

4) The teacher training programmes, conducted in the campuses, have a heavy theoretical bias and are out of touch with the realities.

5) The teacher training method is full of flaws as exemplified by the fact that, although the enrolment at the proficiency certificate, graduate and postgraduate levels is very substantial, the number that makes the grade is very small. It is a clear indication that the precious, but scarce, resources are wasted, making the training cost disproportionately high.

6) English, which is compulsory in other faculties, is not so in the B.Ed. courses. So the students, passing the proficiency certificate level in other faculties, join and pass B.Ed, and then go in for post-graduate courses in some other faculties, treating B.Ed as a spring-board.

7) Teacher training being the confluence of theory and practice, a six-week teaching exercise has been made an inseparable part of the course. But, not only has it been despised or ignored, it is also conducted in different campuses in different ways. Instead of the subject-matter and teaching method going hand in hand, the latter is taken up only some days before the start of the teaching exercise. As a result, the methods employed by trained teachers have not in any way differed from those of the untrained ones.

8) Since the past 9 or 10 years the curricula of the Faculty of Pedagogy have remained unchanged. Even while adopting the annual system, the curricula were devised in a hurry. Hence, it is absolutely clear that they should be thoroughly overhauled to suit the changed circumstances of the country.

9) Each school has to provide a trained teacher with a certain amount as training allowance, putting a strain on its already straitened financial circumstances. To avoid this extra expense it prefers untrained teachers to trained ones. Such schools do not encourage their teachers to go in for training.
10) The Institute of Education was converted into the Faculty of Education, dealing with general education, on the recommendation of the Royal Commission for Higher Education. Chiefs of the campuses, where Education courses are conducted, became responsible to the centre direct, without any relation with the Dean of the Faculty of Education. In some campuses specializing in Education, chiefs have been appointed from other faculties. Under such circumstances, Education programmes could not strike deep roots. The situation is still worse in the multi-purpose campuses. There the human and material resources, earmarked for Education activities, are utilized in programmes that have nothing to do with the faculty of education.

3. Main problems and Issues

1) The Ministry of Education and Culture has at present the policy of training the teachers only after they enter the education service, exercising no control over the entry of teachers. There is a rising tendency to take in teachers who can be hired at a cheaper rate. That is true more especially at the primary school level, where teachers who are not well-grounded in the subject-matters are sent in to teach after giving them a one month in-service training. Clearly, the outcome of it cannot but be less than nothing.

2) There is no unit in the Ministry, capable of laying down policies for all kinds of teacher education and training, or coordinating, directing, evaluating and funding such activities.

3) Although the mounting demand for teacher training and the felt need for raising the quality of training point to the desirability of having different media, methods and measures, no attempt has been made to do so.

4) The campuses under Tribhuban University have no funds for educational improvement, because the university bears the salary of the teachers only.

5) The question of imparting knowledge of the teaching method only after integrating the subjects required for proficiency certificate and graduate courses has been addressed to the desired extent.
6) No attempt has yet been made to attract various teachers' unions to programmes having direct bearing on the teacher training.

7) The objectives, policies and priorities of the teacher education and training programmes have not been re-defined to correlate them with the basic national goals, strategies and preferences in the context of the changes taking place in different sectors of the country, following the historic people's movement.

8) It has not been settled what attributes and skills the primary and secondary teachers should have to produce citizens who reflect in them our national character and civic qualities and specialities.

9) While working out training programmes for teachers from the primary to secondary levels, no decision has been taken on the duration and subjects to be included for the teachers who have had no training, or whose training is limited to short-term in-service courses only.

10) Obviously, it would be impractical to have one type of training for producing teachers for different levels of schools. But no policy, plan or programme has been clearly laid down to determine what kinds of pre-entry and in-service trainings are to be conducted for the benefit of different categories of teachers.

11) Teaching training has sometimes been made compulsory and sometimes not, with the result that the teachers' faith in training has been badly shaken. It has not so far been clearly laid down whether it is obligatory or not.

12) As only ruin-of-the-mill students have gone in for teacher training, it leads to the conclusion that the able ones are not interested in it. Hence, short-term training courses are not good enough for those who wish to get themselves trained.

13) Tribhuban University has been transforming the Education campuses into multi-purpose ones.

14) The atmosphere of the schools has not been favourable to the trained teachers to put into practice the skills they have learnt in the courses of training.
15) There is no national agency to lay down policies and guide-lines, to effect coordination, and to specify the standards and values of teacher education and training programmes.

16) The teachers' unions have not been actively associated with the task of underlining the worth of teacher training, of raising its standards, and of having it recognized.

17) The present Dean's Office has not been playing an effective role to coordinate, direct and control the teacher training programmes, conducted by its constituent or private campuses.

18) For want of suitable training the trainers have not been able to impart standard training.

19) The Inter-relationship and coordination among the agencies, concerned with teacher training programmes, such as Curriculum Development Centre. Controller of Examinations Office, Educational Material Production Centre, and educational administration units, have hampered the growth of effective training programmes.

20) Since a few years a decline has set in on the teacher training programmes owing to the low priority given to the activities of the Faculty of Education by the university.

21) There has been no effective and special programme to induce and involve women in the teaching profession.

22) Due to the shortfall of funds the training programmes could not be developed and expanded to draw up, improve and conduct them according to the needs of the country.

23) The teacher training programme under the Ministry of Education and Culture has remained a part of the Education Project, and there appears to be no plan to keep it in being when the project itself is wound up.

24) There is no coordination between pre-service and in-service trainings.
25) No overall study and research have been mounted to find out the efficacy of the teacher training programmes, handled by the Ministry of Education and Culture, and the Faculty of Education.

26) There is no policy to govern the training of pre-primary and higher secondary school teachers.

4. Recommendations on Teacher Training

Teacher training is a must in the educational sector, especially for those who are already involved with the teaching profession, or who wish to take it up. Only teachers who are well-versed in the subject and who have professional competence can play the role of a catalyst in the all-round development of the students through the medium of effective teaching. Everybody has easily come to accept the propriety of the teacher training programme, for it has a special part to play in speeding up the growth of education and making it more meaningful. If education is the basis for national development: trained and competent teachers are the basis of good education. The principal objective of the teacher training programme is to produce efficient teachers and to lay through them, a strong foundation for the development of education at the national level.

At present the two agencies that have a direct bearing on the teacher training programmes are the Faculty of Education of Tribhuban University, and Ministry of Education and Culture. As the combined resources of both of them will not suffice to cope with the ever-mounting demand for trained teachers and the training needs for the secondary and higher secondary teachers of the future, it is high time that viable alternatives be explored.

By the year 2000 the number of trained teachers required for the primary and secondary schools is estimated at 61,045 and 37,048 respectively. This in itself is a difficult job, a challenging task When it is seen in conjunction with the additional number of teaching centres including universities that are almost certain to come into being at the governmental and non-governmental levels, it will be virtually impossible for the present form and organization of teacher training to pick up the gauntlet.

If, on the one hand, we have to accept the idea of multiple universities, we have to
recognize, on the other, the necessity and propriety of the teacher training programmes that they may launch in the future. If we can visualize now the prospective pressure on the teacher training programme, the responsibility for it will have to be shared with the organized bodies in the private sector. Otherwise, we shall be really hard put to achieve our goal of education for all by the year 2000. It has, therefore, been felt that a coordinating body should be created at the national level on the assumption that a need will come up for maintaining uniformity in the training programmes to be operated by different organized bodies.

In general, the teacher production programme is divided into two types: teacher education and teacher training.

Teacher Education: The proficiency certificate and degrees of B.Ed. and M.Ed. conferred on the candidates who have passed the appropriate examinations conducted by the campuses under the Faculty of Education, or private campuses affiliated with the university, are regarded as a form of teacher training. The students are required to complete the prescribed syllabus within a given period of time before they can appear in the examinations. At the same time, the professional diplomas, awarded to persons associated with educational administration, supervision, formulation and evaluation of curricula, etc., are also included in it.

Teacher Training: The primary teacher training, package training, in-service training, short-term training, and similar other trainings, carried out under the Faculty of Education and Ministry of Education and Culture, constitute the teacher training. Such programmes can be launched by other governmental, non-governmental and private agencies also, subject to certain norms, policies and regulations.

**National Policy of Teacher Education**

1) Some are-born teachers. Most of the others have to be trained to become competent and efficient teachers. To be a good teacher it is not just sufficient that he should have knowledge and experience of the subject-matters. It is equally important that he should acquire requisite skills through the study of science and technology. Teacher training should therefore be made obligatory
to enkindle in each teacher professional pride, to earn basic pedagogical knowledge and skill, and to gain tutorial efficiency.

The following steps should be taken in this connection as a national policy:

a) To make teacher training compulsory for entry into school-level teaching profession:

b) To provide compulsory training to the teachers who, without training, have already secured a footing in the teaching profession:

c) To raise the salaries and other emoluments payable to trained teachers, in direct proportion to the level of their training;

d) To give preference to women in the teacher training programmes;

e) To lay down training programmes for different levels of teachers:

2) To launch a wide variety of training courses in view of the mounting demand for education, and to entrust different agencies, such as the universities, Ministry of Education and Culture and private and nongovernmental organizations with the task of providing them:

3) To de-centralize the teacher training programme so that it can be conducted at the regional level; and

4) To set aside 70 per cent of the training allowances for women and 30 per cent for men.

**Teacher Education and Training Programme**

(1) Pre-primary Teacher Training: In our country the number of pre-primary schools is increasing by leaps and bounds. Until now no provision has been made for training in any way the teachers employed by them. This situation should be remedied at once. For this purpose, steps should be taken to provide (a) 10-month training should be imparted to SLC pass teachers, and (b) short-term (of at least six weeks’ duration) training to train incumbent teachers at the interval of every 5 years.

(2) Primary Teacher Training:
(a) Degree-based two-year training programme should be conducted at the proficiency certificate level with a view to inducing specialization in primary education. For the time being, the SLC pass candidates will be certified as qualified primary teachers on completion of the ten-month package course. By degrees emphasis should be laid on the provision of primary teachers from among those who have passed the proficiency certificate level in other subjects, after putting them through a ten-month training course.

(b) The syllabus for the existing 150-hour training programme is too theoretical for the good of the SLC pass incumbent teachers. It should be kept in operation with timely changes to include subjects and activities that have direct relevance to the daily work of teaching and learning. A teacher who has completed this course once should be required to go through a slightly higher level of training twice, before he qualifies to become a certified primary teacher.

(c) Every trained primary school teacher should be given a short-term in-service training (of at least 6 months) at the interval of every five years.

(d) SLC pass incumbent teachers who have received training of less than ten months but not less than 5 months should be given at package training of 4 months before granting testimonials of certificated primary teachers.

(e) A 3-year B.Ed. course for specialization in primary education should be conducted for the benefit of those who have passed the proficiency certificate level with specialization in primary education.

(3) Secondary Teacher Training:

a) Persons passing proficiency certificate level from other faculties should be given a 10-month training before they are qualified to receive certificates as trained teachers for lower secondary schools.

b) A 3-year B.Ed. course should be conducted for specialization in different subjects of secondary education.

c) A 1-year B.Ed. course should be conducted extensively for specialization in different subjects of secondary education.

d) In-service training should be given to incumbent trained teachers every
five years. It should be a short-term training of six weeks at least.

(4) Higher Secondary Teacher Training: Persons holding B.Ed. degrees with specialization in different subjects of secondary education, should be allowed to take part in the 2-year M. Ed. course with specialization in one of the subjects of higher secondary education. A five-month training programme should be conducted for the benefit of post-graduates in other subjects.

(5) Other Manpower Training: This programme should be launched with the aim of producing specific educational manpower required for achieving the special targets of teacher training. In this connection, post-graduate courses should be launched to create expertise in educational administration and management, educational planning, educational supervision and monitoring, curricula and assessment, educational advancement and promotion, educational technology, and educational economics (fiscal management of teaching institutions), besides producing teacher trainers for primary, secondary and higher secondary education. The Course should be of various duration as given below:

a) Two-year course for B.Ed. degree holders;

b) One-year course for post-graduates in other subjects; and

c) Additional 5 months training in teaching techniques for (b) above.

(6) Vocational Teacher Education and Training: Vocational training programmes are conducted by different agencies in different parts of the country. They also form a part of the school curricula. Evidently, such schools need vocational teachers. Sanothimi Campus of the Faculty of Education is the only institution which is equipped to run proficiency certificate and graduate courses in vocational education. It should continue its activities after devising curricula to suit the qualities and skills which teachers in vocational and technical schools should have.

(7) Laboratory Schools: A school will be selected and developed as a laboratory school in each of the central and regional campuses of the faculty of Education. Its aim will be to allow the trainee-participants in different teacher education and training programmes to practise their teaching skills in
different subjects; to test the efficacy of new teaching methodologies in the context of Nepal; and to inculcate skills in investigating and solving educational management, administrative and financial problems of the schools. Besides, extension campuses and mobile units also should set up formal relations with one of the local schools which are running on a regular basis.

(8) Child Study Centre: Teacher Education and Training have a special bearing on the children of Nepal. Hence, the different aspects of their physical growth, and mental and intellectual evolution should be studied and investigated into. For this purpose, attention should be given to establishing a Child Study Centre under the Faculty of Education.

(9) Short-term Refresher Course: An arrangement should be made to provide refresher training for the technicians and experts who have no specialized training or who were trained long ago. This training may also be given to working teachers, administrators, supervisors, planners, curriculum framers and assessors in the field of education.

(10) Pre-service and In-service Training: A short-term training should be given to the persons who wish to enter the teaching service of the university, or to working teachers who wish to avail themselves of the opportunity. Its aim should be to provide introductory information on subject-wise teaching techniques, educational methodology, formulation and evaluation of curricula, research techniques, evaluation techniques, history of education, and social and philosophical aspects of education. It should be conducted in the form of seminars and workshops at the central and regional levels under the Faculty of Education.
9. SPECIAL EDUCATION

1. Background

Around 1961 the Rotary Club sent a person named Kumar to the Perkins Institute for the Blind in Boston, USA for one month's teacher training course. On his return he started a school for the blind at Jawalakhel with the participation of four or five students. It remained in existence for some months and was closed down.

Two years later Dr. Isabel Grant, a blind American lady, visited Nepal on vacation. When she was told that there was no provision for the education of the blind, she contacted the authorities of the day and placed before them her plan for conducting integrated classes for the blind. As a follow-up, she sent Mr. Lloyd Stevens, a blind American Peace Corps volunteer, with some educational materials to carry out an educational programme for the blind.

In the winter vacation of 1965 some of the teachers of the Laboratory School and some students of the College of Education were to teach the blind and the integrated educational programme got off the ground the same year with 8 or 9 blind students joining the Laboratory School. It was followed in 1967 by the establishment of the School for the Deaf in the precincts of Bal Mandir, Naxal. In 1969 Nepal Association of the Blind and Disabled came into being with the active involvement of Mr. Khagendra Bahadur Basnet, who was himself a disabled person, and a School for the Blind and the Disabled was built in Jorpati with the aim of imparting general education and vocational training to the handicapped. On his death this school was named after him as Khagendra New Life Centre.

The Nirmal Child Development Centre was set up in 1980, which aimed at educating the mentally retarded. In this way, special education schools were set up to cater for four areas of human disability. What is still lacking is a special education school which is equipped to deal with children who have more than one handicaps.

Although His Majesty's Government has initiated the special education programme since the winter of 1965, its development and expansion on a planned basis has taken shape only since the application of the National Education System Plan in 1971. Its direct outcome was the setting up of the Special Education Council in
Even after the establishment of the Special Education Council the rate of progress in this area has not measured up to the expectation for various reasons. Prominent among them are the lack of understanding about the importance of special education at the governmental and social levels, shortage of required expertise, inadequacy of physical and material resources, and shortfall of funding. But at a time when the Council was setting in motion, though slowly, the process of promoting and expanding special education, the Social Service National Coordination Council, which was brought into being in 1977, took over the responsibilities for it in the hope of receiving foreign assistance. From then on the Special Education council was left with no role to play except to provide financial grants to social organizations and philanthropic bodies which were devoted to the cause of special education.

As a result, the Ministry of Education and Culture ceased to take interest in such basic activities like the formulation of curricula, production of text-books and other educational materials, inspection and teacher training. International non-governmental organizations extended their assistance for the operation of the schools for the disabled, vocational training, and rehabilitation. But special education could not grow in a planned manner because, in the first place, the national policies and objectives were not clear enough and, in the second place, the governmental agencies became passive spectators. True it is that some special education schools were opened, but, as no attention was paid to what they were doing, progress was confined to the quantitative side only.

After 1981, the Year of the Disabled, foreign donor agencies took greater interest in special education. But, as such aids would flow in for a certain span of time only, there was no clear conception of who would carry out the programmes and how, when once they ceased to flow.

Slowly, due to shortage of physical and manpower resources, the management of expanded institutions started to show disquieting signs of decline, giving rise to the argument that social organizations alone could not deliver the goods. Meanwhile, it was felt in the official circles that, if special education was ignored, while launching programmes like basic education and education for all by the year 2000, it would
amount to missing out one important aspect of education itself.

Accordingly, the Ministry of Education and Culture appointed committee in 1989 to come up with timely recommendations on the development and expansion of special education. Acting on the recommendations put forward by it, the Ministry of Education and Culture decided to take special education under its wings by degrees, and budgetary arrangements were made for FY 1991/92 under which the salaries and allowances of the teachers of the special education schools would be borne by His Majesty's Government. Meanwhile, the Special Education Council was reorganized under the chairmanship of the Minister of Education and Culture with a view to re-activating it.

2. Present Situation

In Nepal at present the blind and the disabled are at study from primary to postgraduate classes, while the opportunities are open to the deaf up to class 9 only. The conditions of the mentally retarded are still more pitiable. The programmes for them are limited to the three Rs and vocational training. No arrangement has yet been made for persons who are disabled in more than one ways. No reliable data are available on the handicapped. According to the Central Department of Statistics, 5.2 per thousand are disabled in one way or the other. And according to the survey of the International Year of the Disabled, 30 per thousand are disabled, while the World Health Organization is of the view that 100 persons per thousand are handicapped, physically or mentally.

The sort of education which is available to the disabled cannot be said to be satisfactory. Less than 1 per cent of the handicapped children of the age group 5-14 is estimated to have received learning opportunities. The student population in 1990 totaled 1,000, and the special schools numbered 26 in 1989 in addition to 14 integrated schools. The integrated schools are for the blind and other physically handicapped persons, while the hearing impaired and the mentally retarded are admitted to special schools only.

The management of special education is the responsibility of the Special Education Council (Ministry of Education and Culture) and Special Education Committee (Faculty of Education). Among the benevolent societies there are some who work for the blind, the mentally retarded, the physically disabled, and the deaf. Teacher
training is taken care of under the package programme of the Faculty of Education the package programme for the deaf, and the B.Ed programme for the deaf and the blind. Rehabilitation services are handled by the philanthropic societies to a negligible extent. No special provision has been made for the disabled in the school curricula. There is a shortage of experts on the curriculum for the disabled.

3. Main Problems and Issues

Although it has been more than 25 years since special education was initiated in Nepal, its development has not been adequate and orderly. Of course, it has been widened in scope, compared to the past. But the stage of its development has not been so high.

a) The main factors responsible for this state of affairs are the following:

People and Popular Fallacies about Physical and Mental Impairments: In the eyes of science physical and mental disabilities are caused chiefly by poverty, malnutrition, venereal disease and accident. But the majority of the Nepalese society is not only poor but also superstitious, fatalistic and convention-ridden, exerting no strong pressure on behalf of special education. Under such circumstances there should be no wonder, if this sector is neglected.

Low Priority in the Official Policy: Till now the government does not seem to have any policy, plan and programmes in the field of special education. It is worth noting that, till the Seventh Plan, Special Education has had no national goal. In spite of the fact high-sounding slogans like 'Basic education', 'Education for all' and 'Let no child be deprived of the bright light of education' were raised in the field of education itself, special education has not developed along the right lines, because no policies were framed to match those sonorous catch-phrases.

Misconceptions about Special Education: Be it at the popular level, or be it within the framework of the State policy, the impression is there that the education for the disabled carries the overtones of welfare work or similar implications. Perhaps the idea is that the education and training of such people is an act of charity not in any way connected with the basic functions which any government should carry out as its
national or social obligations. This attitude is found reflected indirectly in official policies and actions. in our own context, the fact that in the course of the implementation of the National Education System Plan the Ministry of Education and Culture thought it fit to transfer its responsibility for special education to the Social Service National Coordination Council, a philanthropic body, is a clear and unmistakable indication of the existence of that sort of thinking. The educational plans that have appeared on the scene reveal no signs of change.

b) Problems:

Basically, the above factors have been responsible for the innumerable problems facing special education. The degree of disability has never been worked out for the purpose of special education. So one uniform system of teaching has been evolved for them, whether they be partly disabled, semi-disabled or fully disabled. To formulate a proper plan is not an easy task, because there is no reliable information on how many and what kind of disabled persons are found in which region or district of the country.

Teachers at work in special schools are paid less and have less facilities than their counterparts in general schools. Justice requires that they should be paid more and have more facilities. Differentiation in pay-scales are made between teachers who have identical qualifications. Untrained teachers are also appointed to special schools. These and other anomalies have contributed to bringing down the quality of special education.

As curricula and text-books, designed to meet the specific requirements of special schools are not available, the learning process of the students has been hampered. Apart from text-books they have no other means for gathering knowledge. Educational materials and other accessories, so essential to teaching and learning, are in short supply: and no effective measures have been taken to improve the training programme. The training institute, which is no other than the Faculty of Education itself, suffers from the shortage of essential educational materials, accessories and appropriate programmes. All these factors have combined to bring about the present situation.

No extra-curricular activities are provided for the physical, intellectual and mental
growth of the students under special education. They are deprived of all such opportunities.

Special education looks incomplete because there is no adequate provision for the mobility and orientation training, suitable vocational and technical education, and rehabilitation for the blind.

It should be remembered that disabilities are partly caused by the fact that nothing is taught in general schools about disability, how they are caused and what can be done to prevent them. Another thing to be remembered is that the lack of a proper system of health check-ups in schools has delayed treatment and induced disabilities in some cases.

The disabled of various types are mostly found in impoverished families, living in a society which is steeped in ignorance, superstitions and fallacies. For that very reason their parents or guardians are not in a position to spend money on their education. Although such schools should be free of charge, the prevailing state of the society is such that some charge is unavoidable. But handicapped children are deprived of educational opportunities even though they are born in affluent families, because their parents or guardians believe that nothing concrete will result from the investments made in them.

The special education programme was taken in hand without creating the essential infrastructures like manpower, curriculum, text-books, educational materials and other physical amenities. The integrated schools, where vocational training is given, have no facilities for practical work. As a result, it has become unproductive. Though educated and trained, the disabled persons have inadequate employment opportunities, forcing them to continue their original state of dependence. This is also a loss to the nation, because it is deprived of the contributions which they could have made.

Special education schools have been opened one after the other, regardless of the fact that the existing mechanism of inspection and monitoring is not adequate to find out how they are managed what kind of curriculum, text-books and other educational materials are used, how good the teaching/learning environment is, and whether there is any room for improvement. For lack of overall evaluation of the
functioning of these schools, it has been found difficult to systematize them. Both the teachers of special education and disabled students are not receiving the desired cooperation from the directors, head masters and other teachers of the integrated schools because they themselves have only the faintest idea of what special education is all about.

Until now not a single special education library has been set up in the country, especially a Braille library which is so essential to the blind. The only means available to them for their intellectual development is text-books. His Majesty's Government has given no thought to the kind of job-related adult education programme which should be evolved for the benefit of the illiterate and handicapped adults. No system has been developed to recognize the worth of the certificates awarded by the special schools. For this reason, the disabled persons find it difficult to get suitable jobs educated and trained though they are.

4. Recommendations

The following recommendations are made to give practical shape to our national commitment to basic education, our whole-hearted support to the principle of education for all, our positive response to the United Nations' call on the right of the child, and our Constitutional principles and policies to the effect that the State is required to make special arrangements for the education, health and social security of Orphans, helpless women, the old, the handicapped, and the disabled:

1) The goal of special education should be to impart such knowledge and skill as are suited to the social integration and self-reliance of the disabled.

2) There should be a policy commitment on the part of His Majesty's Government to expand the scope of special education and enhance its quality. The Disabled Act, 1982, should be suitably amended and enforced along with the rules framed under it to give a legal form to that commitment.

3) Special education should form an integral part of the programmes to be launched in connection with the basic education and education for all. The curricula of the national education system should be adjusted to the extent necessary for accommodating the special needs of the disabled, and the curricula so adjusted should have as much force as the original one.
4) Special education should be granted through integrated schools, wherever possible. For this purpose a special unit may be created. Special schools should be established only for those whose disabilities are very much pronounced, such as those whose hearing is extremely impaired or whose mind is extremely retarded. As it would be in the interest of all to have the least number of such institutions, each development region should have one such institution to serve the needs of those whose affliction is really extraordinary. His Majesty's Government should bear the full cost of constructing and equipping such schools including the residential facilities. It should also meet the operational cost to some extent, but the bulk of it should be obtained through the mobilization of popular support.

5) Special education should be free. Hostel facilities, educational materials, equipment, etc. should also be made available free of cost.

6) Special education should be skill-centred, because its justification is to be found in its ability to confer economic self-reliance on the disabled by means of vocational and technical education and training, which are suited to their particular incapability and are practical. Such skill-building education and training should be divided into four levels—low, middle, higher, and the highest. For this purpose technical schools, cottage and handicraft training centres, and training centres operated by the associations for the disabled should be activated and energized. Training should be initiated only after carefully studying the kinds of skill that should be imparted to them.

7) Emphasis should be placed on the institutionalized development of a training programme for the teachers and other forms of manpower engaged in special schools for the sake of their continuous expansion and qualitative improvement. For this purpose the Special School Teacher Training Programme under the Faculty of Education should be geared up and fully equipped. In the future attempt should be made to establish a National Special Education and Rehabilitation Centre.

8) Special education is a difficult job for all concerned and, because of the uncommon mental make-up of the disabled, it has its own Intricacies. It is a job which cannot be accomplished successfully or meaningfully by any teacher...
with any kind of training. It calls for teachers who have special attitudes and aptitudes or, better still, who have the spirit of service. Hence, their terms of employment should be more attractive than those of ordinary teachers.

9) The Special education Council should be galvanized to give policy directives to work out programmes for, and to coordinate and assess the national, regional and district-level activities in the field of special education.

10) The disabled should be motivated to take part in extra-curricular activities. They should also get the chance to participate in local, national and international competitive meets, as that may raise their morale.

11) The basic curricula may have to be adjusted to meet the special requirements of the disabled. It would be desirable to have this job entrusted to a task force, consisting of curriculum experts and specialists in special education.

12) Curriculum experts and specialists in special education should be associated with the task of preparing text-books for the blind and the hearing impaired. The printing of such books should be done at the Janak Educational Material Centre. They should be made available free of cost.

13) Some symptoms of disability can be eradicated, if they are treated at an early stage of their manifestation. It would, therefore, be beneficial on a long-term basis, if disability-centred health education is included in the curriculum of special schools. Stress should also be put on the preventive and curative treatment of disabilities to put the future generations on the alert. The attention of the curriculum experts should be drawn towards this aspect of the question.

14) Every integrated school should have a library or reading room, having a stock of text-books and reading materials suited to the special needs of the handicapped. As for special schools, each one of them should have a Braille library or other specialized library, depending on the nature of the disabilities of the students.

15) The operational cost of special schools should be met out of public grants, and the funds made available by national and international donor agencies and individual charities.
16) Educational service through the medium of special schools is not just enough for the disabled. It should be supplemented by the disabled student and family counselling service together with community rehabilitation, service, and special attention should be given to providing such services through the teachers concerned, social workers, and benevolent societies.

17) Organizations and individuals, rendering commendable services to the cause of special education, should be awarded national honour and prizes.

18) As curricula, text-books and other reading materials should be designed to match the nature of impairment, arrangement should be made to collect detailed data on the number, age, sex, degree and cause of disability.

19) Special education appears to have no future, until radical changes are made in the wrong notions and attitudes held by most men about physical and mental disabilities, on different cultural, religious, ethnic and economic grounds. It should, therefore, be conducted as a campaign, with the involvement of Education, Health, Communication, and Labour and Social Welfare Ministries, educational institutions, industrial undertakings, political parties, youth power, and various social organizations.

20) Non-governmental organizations and other agencies connected with the welfare of the handicapped should be activized and motivated to take interest in educating them, and providing them with scholarships and physical amenities.
10. NON-FORMAL EDUCATION

1. Background

Any educational activity which lies outside the formal education system is called non-formal education. In Nepal literacy movement occupies a position of eminence among the non-formal educational activities. The present literacy programme encompasses two groups of persons. They are:

   a) Adult illiterates of the age group 15-45, and
   b) Out-of-school children of the age group 8-14.

As a matter of fact, literacy and development are closely linked up. Studies and research, mounted in some of the developing countries have revealed that in a country where the illiteracy rate is higher that 50 per cent of the population the following features ordinarily seem to be endemic:

   a) The average expectancy of life is below 50.
   b) The child mortality rate is more than 100 per thousand.
   c) The percentage of enrolment in schools is low.
   d) The national productivity is less.
   e) The rate of fertility is high. (1) Child care is less successful. (g) Half or more than half of the population lives below the line of poverty.

Other studies have shown that non-formal education has contributed to the following: (a) To increase the level of income of the common man, (b) To open the chances of employment in urban areas, (c) To push up productivity in rural areas, (d) To bring down the birth rate, (e) To improve the health and nutrition status. and (i) to change the conventional outlook on education.

Although literacy is an end in itself, it is also a dependable means for other purposes. As a means, it is a powerful medium of education and communication. It assists development. It is an important instrument for the enrichment of the individual. It is also the first step towards the life-long education of the individual.

Non-formal education has been in operation in Nepal ever since the enforcement of the periodic plans. In the early times it had to face numerous problems. The reading
materials were not prepared in a scientific manner. Not having any scope for getting themselves trained, the teachers had recourse to traditional teaching methods, which ran counter to the principles of adult psychology. There was no monitoring mechanism, and most of the participants were forced back to illiteracy for want of post-literacy programmes and reading materials.

In the initial years the coverage of the programme was not wide enough. During the First Plan period the modest aim was to bestow the blessings of literacy on 1,000 persons only. It shot up to 66,000 by the Third Plan period. Till then the programme aimed at literacy alone. An attempt has been made to give it a job orientation since 1965 and subjects like farming, hygiene, sanitation and forest conservation were included in it.

During this period some other governmental departments, agencies connected with development programmes, and social bodies started carrying out adult literacy activities. The extension programme of the Ministry of Agriculture and the women's literacy programme, conducted by the then Women's Association may be cited as notable examples.

The National Education System Plan (1971-1975) included adult education as a priority area, and laid emphasis on the need of making it job-oriented. By the year 1978 a National Literacy Programme was developed after a long series of trial and error. Under this programme, which aims at providing job-oriented literacy and skill all over the Kingdom, multi-message text-books were produced in a systematic and scientific manner, and teaching methods were reformed extensively, resulting in its gradual expansion. In FY 1978-79 the adult literacy programme was launched in 25 districts of the country with 8 or 9 literacy classes in each of them. In the following year it was increased to total 400 classes in 52 districts. It was subsequently extended to reach 2,500 classes. Thus, during the Fifth Plan period alone 300,000 persons were made literate.

The target of the Sixth Plan (1980-85) was to bring literacy to 900,000 adults. It was during this period that experimental works were consolidated with a view to conduct the adult literacy programme in an integrated form. The main thrust of the Seventh Plan was to widen the scope of the programme and increase its efficacy. In the year 1988 a decision was taken to launch the literacy programme in the form of
a campaign, and a pilot project was set in motion in Surkhet with that end in view.

At present, the literacy campaign has been extended to one district in each of the development regions. As a result, 100,000 illiterate adults had the privilege of becoming literate in 1990 alone. During this Plan period the involvement of other governmental and non-governmental organizations, besides the Ministry of Education and Culture, registered a remarkable upswing. In the year 1990 alone the number of such organizations was 45, and about 50 per cent of the literacy programmes was conducted by them.

In FY 1991-92 a programme was developed to bring literacy to 45,000 adults through the Ministry of Education and Culture, and 75,000 through other governmental agencies and non-governmental organizations. Besides, separate curriculum was created and utilized by some non-governmental organizations and under the Seti project named Education for Rural Development.

2. Present Situation

Literacy in Nepal which was estimated at 2 per cent in 1950-51, amounted to 36 per cent of the total population in 1990-91--54 per cent male and 18 per cent female. Currently, attempt is being made to bring literacy to school-going children through formal education in 14,000 primary schools, and to adult illiterates, out-of-school children and school drop-outs through non-formal channels in which about 50 governmental and non-governmental organizations are involved. In spite of such attempts, the provision of literacy education is out of step with what is required. The present estimate is that 1,442,000 children of primary school-going age (6-12 years of age) are out of school, in contrast to 20,000 children who were covered by non-formal children's education this year. Similarly, the delivery of literacy service to 100,000 illiterate adults (15-45 years of age), in the context of 9,000,000 adults standing in need of such service, is very disappointing, to say the least. Another alarming feature is the big gap between male and female literacy, and its unfair distribution between urban and rural areas. Comparison of Table 1 with Table 2 below will bring the above into bold relief.

Table 1

<table>
<thead>
<tr>
<th>Difference in Male and Female Literacy Status</th>
</tr>
</thead>
</table>

148
<table>
<thead>
<tr>
<th>Sex</th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>19.9</td>
<td>31.2</td>
<td>36</td>
</tr>
<tr>
<td>Male</td>
<td>30.7</td>
<td>46.7</td>
<td>54</td>
</tr>
<tr>
<td>Female</td>
<td>8.6</td>
<td>15.7</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Adult Education Section, Ministry of Education & Culture

Table 2

<table>
<thead>
<tr>
<th>Sex</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>50.5</td>
<td>62.7</td>
</tr>
<tr>
<td>Male</td>
<td>61.1</td>
<td>77.7</td>
</tr>
<tr>
<td>Female</td>
<td>38.2</td>
<td>47.5</td>
</tr>
</tbody>
</table>

Source: Demographic Sample Survey (1986/87), First Report.1987

That the national will and commitment to non-formal education is very feeble is clearly borne out by the following facts:

a) The government has no clear-cut policy on non-formal education

b) Programmes are drawn up as an intermittent, one-shot affair.

c) Non-formal education is accorded a low priority from the financial point of view

d) There is just one tiny section to look after non-formal education.

e) There is no agency at the regional and district-level to bear the responsibility for non-formal education

3. Main Problems and Issues

From the analysis of the above facts it becomes clear that the issues at stake are (a) political will on the part of the government, (b) equality of opportunity and involvement, (c) administrative structure, (d) relevance of curricula and text-books, (e) development process of human resources, and (f) evaluation. A careful scrutiny of the above issues reveals that non-formal education in Nepal is riddled with many problems.

Policy Aspect: The concept, policy, target and objective of non-formal education are not clearly defined at the national level, indicating that there is no commitment to it and that it lies outside the national education system. Similarly, for want of a
national definition of literacy, the governmental and non-governmental organizations, conducting non-formal education, have no uniform outlook on literacy.

There is a lack of definite policy on the linkage between formal and non-formal education. As no equivalence has been laid down between various levels of non-formal and formal education, individuals, wishing to migrate from the former to the latter, are frustrated.

The effectiveness of non-formal education has been adversely as there is no institutionalized process and agency to establish coordination among various governmental and non-governmental organizations in charge of it. Although there has been a good deal of debate on the role and significance of non-governmental organizations in non-formal education, no proper policies have been formulated, nor has any adequate endeavour been made to include them in the full range of national activities in this direction. No reasonable goals and principles have been established for the provision of special children's education as part of non-formal education for the benefit of those of them who have, for various reasons, remained beyond the pale of the school system.

**Implementation Side:** the implementation aspect of non-formal education is, at present, wholly centralized. Programmes are not evolved in response to the need and demand for the targetted groups. The quota is fixed at the centre and sent out to the districts for implementation. There is hardly any attempt to rouse popular awareness about it. Publicity is at the zero level. Mass media like Radio and TV, newspapers and magazines, have not been put to use.

Confined to district headquarters and prominent urban areas, the programme has, in most cases, remained out of bounds to women, backward sections of the community, and disadvantaged groups. Local non-governmental organizations have not been mobilized to the required extent. In the absence of proper coordination, there has been no uniformity in the various implementation aspects of the programme, such as time-frame, style of performance, salaries and other expenses. This is particularly true of the programmes conducted by the various units of the Ministry of Education and Culture. Being quota-based, they are distributed, not on the basis of the real requirements of the districts, but under political and other
pressures. Therefore, they have no continuity. Monitoring and follow-up measures are feeble and weak-kneed. There is no provision for post-literacy programmes, and no reading materials for the neo-literate. A healthy tradition of evaluation is yet to evolve. Barring some occasional evaluations, the national literacy programme has been subjected to no comprehensive overall scrutiny.

Technical Side: NO national curriculum has yet been created for the literacy programme. What exists now was based on adult psychology, assessment of needs, and field testing conducted 1 years ago. In the light of the political changes that have taken place since, its relevance has become questionable.

No attempt has been made to diversity its content from the geographical and ethnic standpoint. The duration of the training programme is far from adequate. The capability of trained trainers has not been built up and upgraded. As a result, the training which they give to the teachers is not up to the mark.

On the other hand, the teachers not being properly selected, and most of them being under-qualified, they could not absorb what little they were taught. There are many examples where they betrayed their incapacity to teach according to the adult psychology.

Organizational Aspect: There is no clear organizational structure for the implementation of non-formal education programme. At present the only unit in existence in this area is the Adult Education Section in the Ministry of Education and Culture. At the local level the District Education Inspectorate is supposed to bear the responsibility for non-formal education. but it has no official deputed for that purpose, let alone the question of trained manpower.

Financial Arrangement: Viewed against the background of the magnitude of the problem, the budget available for non-formal education is very meagre. There is no policy to mobilize internal and external resources to make it self-sustaining in the end, nor any effort has been made in that direction. In other words, nothing has been done to seek out the feasible ways of lessening the financial burden of His Majesty's Government.

5. Recommendations:

1) The following should be the objectives of non-formal education:
a) To impart knowledge, information and skill through non-formal means to the individuals of different age groups who, for various reasons, have been unable to receive formal education;

b) To bestow job-oriented knowledge and skill by means of adult literacy programmes, and to enable them to earn a living;

c) To confer literacy on out-of-school children and school drop-outs of the 8-14 age group through the medium of children's education programmes, and to encourage them to go in for formal education:

d) To give momentum and continuity to the life-long process of learning, especially in the interest of the neo-literate;

e) To conduct literacy campaign in order to root out illiteracy from the society.

2) A national definition of different levels of literacy -- basic level, middle-level and self-study level -- should be prepared, and the equivalence of each of them with formal education should be laid down. Similarly, the curriculum for the first and second stage of children's education should be worked out, and the equivalence of each of them with formal education should be determined. While deciding on the equivalence of different levels of literacy, the basic level should be equated with class 3 of primary education, and the middle-level with class 5. Likewise, the first stage of children's education, conducted by the Children's Home or other social organizations, should be equated with class 3 of primary education, and the second stage with Class 5.

In this context, while giving form to the curricula of the adult literacy and children's education, care should be taken to include in them the main features of formal education. At the self-study level condensed courses should be prepared according to the need and interest of the targeted groups, and opportunities should be afforded for the continuity of study through different media like regular classes, remote education, correspondence course, and study centres.

There should be a provision for admission from the first two levels of adult literacy and both the stages of children's education to formal education after passing the relevant entrance tests. At the self-study level, admission from lower secondary to higher secondary level should be open to those who are able to pass the relevant entrance tests.
3) In keeping with Nepal's commitment to education for all by the year 2000 and the 1990 Declaration on the right of the child, the present rate of illiteracy should be brought down by 40 per cent by the year 2000.

4) Non-formal education should be established as a principal component of the national education system.

5) The forms and contents of formal, non-formal and technical education from the initial to the terminal level should be flexible enough to facilitate migration from the one to the other.

6) Appropriate steps should be taken towards making the post-literacy programmes and practical skill-based education available to all.

7) Literacy programme should be expanded with greater intensity. It should be launched in the form of a national campaign, with extensive pre-planning. It should aim at eradicating illiteracy from a particular village or district to begin with.

8) Apart from the regular financing of His Majesty's Government, a special fund should be created for the literacy campaign.

   **Role of the Non-governmental Organizations**

9) National and international non-governmental organizations, engaged in non-formal education, should be extensively, mobilized in view of the active role they can play in this area. As regards international non-governmental organizations, official endeavors should be made to persuade them to give priority to non-formal education and carry it out in an intensive manner.

10) National non-governmental organizations, taking interest in non-formal education, should be identified at the local level, and their involvement in it should be intensified by giving them technical support in the form of training and textbooks, and financial grants.

11) Non-governmental organizations, working in the field of non-formal education, should be associated with the working out of national literacy curriculum and development of textbooks and programme designs.
12) Programme models designed by non-governmental organizations should be studied, and attempts should be made to apply creative and successful ones to other areas as well.

**Technical Aspects**

13) Reading materials in use now should be refined to make them more timely and less costly.

14) Requisite studies and research should be mounted and model materials should be evolved to create reading materials in Nepali and other languages dialects of Nepal.

15) The minimum qualification of the teachers should be class 8 for remote areas and class 10 for other places.

16) Post-literacy programmes should be established as an integral part of non-formal education, and provision should be made for reading and other materials.

17) Rural and community study centres should be provided for creating an atmosphere suitable to literacy.

18) Supplementary, reading materials should be produced for keeping up the reading habits of neo-literate, with the inclusion of subjects that may rouse their appetite.

**Training Aspects**

19) Arrangements should be made for the appointment of principal trainers at the centre and trainers at the district level, and they should be trained from time to time to make non-formal education more fruitful.

20) The duration of the pre-service training programmes of teachers should be extended and rendered more effective. If a teacher is re-employed next year, he should be put through a refresher course.
21) Short-term training programmes and introductory seminars should be conducted in the villages and districts to acquaint everybody connected with non-formal education with its need and significance.

**Organizational Set-up**

22) A high-level National Non-formal Education Council should be formed, comprising representatives of His Majesty's Government, non-formal education experts, and representatives of non-governmental organizations, and charged with formulating policies and guide-lines to make the non-formal education programme systematic, well-organized and effective.

23) A Coordination Committee should be set up under the National Non-formal Education Council whose main task will be to establish coordination among the whole range of agencies involved in non-formal education. It should ensure regular contacts among them by holding meetings and seminars.

24) The Adult Education Section now existing at the central level should be converted into an Adult Education Division with the induction of a suitable cadre.

25) A national level Non-formal Education Resource Centre should be established under the Ministry of Education and Culture, whose main functions will be to train the necessary manpower, to review the curriculum and reading materials from time to time, to refine them, and to evaluate the programme.

26) A Nori-formal Education Section should be created under the Regional Education Office, with requisite manpower.

27) An administrative officer and a training officer should be appointed in each District Education Inspectorate, exclusively responsible for non-formal education.

**Implementation Aspects**

28) The implementation mode of non-formula education, which till now has been wholly centre-oriented, should be radically transformed, and the District Education Directorate should be given the responsibility for shaping and
implementing programmes according to the demands and needs of the targeted groups. In its turn, the Inspectorate should constitute coordination committees at the district and village level, consisting of educationist and representatives of various non-governmental organization to enlist popular cooperation in the implementation of programmes.

29) The present quota system should be done away with.

30) Non-formal education programme should start in a certain area of the district, and radiate outwards from that focal point.

31) Teachers should be motivated with increased remunerations and other facilities.

32) Supervisors or monitors should be appointed at the local level, with arrangements to have them suitably trained in order to reinforce the monitoring system and make it more result-oriented. Besides, the programme should be periodically monitored from time to time by the officer in the District Education Office who is responsible for non-formal education, and the District Education Inspectorate. The amount of allowances payable to the monitors at this level should be increased.

33) Pending the creation of the Resource Centre system, the following steps should be taken to establish relationship between non-formal and formal education:

   a) To run literacy classes under the management of primary schools:

   b) A secondary school in the neighborhood of 6 or 7 primary schools should be used as a Resource Centre, and its headmaster, or a person named by him, should be designated as supervisor:

   c) To award some marks to the students of class 9 or 10, who confer literacy on a certain number of men and women of their wards, neighborhoods, and families through the medium of non-formal education:

   d) To associate SLC candidates, waiting for the publication of results, with the literacy campaign:

   e) To induce participants in the National Development Service to involve themselves with the literacy campaign.
34) The current House of Education programme should be effectively expanded to cover the out-of-school children.

35) Political parties and social associations should be given a role, particularly in the literacy campaign, and their workers should be mobilized as volunteers.

36) While appointing teachers, preference should be given, wherever possible, to competent local people who are not engaged in any of the local schools. This should help widen the employment scope at the village level.

37) Groups, participating in non-formal education, should be helped out with additional inducements like credit facilities, opportunities for skill development, and distribution of vegetable seeds and saplings, and first-aid kits.

38) 10 or 15 per cent of the population remains illiterate, even after the completion of the literacy campaign. To deal with this natural phenomenon, literacy programmes should be continued, and serious thought should be given to the question of making primary education compulsory by stages so that the spectre of illiteracy may be driven out from the society for ever.

39) A publicity blitz should be launched to create awareness among the people about the importance of non-formal education.

40) Talk programmes, exhibitions, and seminars should be held to induce positive thinking about non-formal education.

**Financial Matters**

41) A Non-formal Education Fund should be created at the national level, and it should be kept independent of the budget system of His Majesty's Government and operated through the Non-formal Education Council.

42) Negotiations should be conducted at the official level with the national and international donor agencies for the mobilization of resources.

43) To reduce the financial burden of His Majesty's Government a certain amount should be set aside from the funds of the Village Development Committees, Municipalities and District Development Committees.
44) A greater amount of the education budget should be ear-marked for non-formal education in view of the fact that the amount made available hitherto has been very meager.
11. FINANCIAL MANAGEMENT OF THE EDUCATIONAL SECTOR

1. Background

Financial management of the educational sector implies mobilization and effective utilization of financial resources for the achievement of educational goals. Basically, it indicates the governmental outlay at different levels and programmes in the field of education. It also includes the expenses incurred by the families and individuals, the private sector like the non-governmental organizations, industry commerce, vocational organizations, and community-based organizations. The following are the chief objectives of the economic provision for education:

a) To arrange funds for priority programmes:

b) To mobilize private sector and local resources, besides governmental outlays:

c) To utilize the available resources effectively:

d) To achieve the maximum at minimum cost:

e) To estimate beforehand the amount required on the long-term and middle term basis, and to identify its sources.

2. Present Situation

The continuing growth of population, and the consequent rise in the number of persons who have to be educated, the mounting desire of the people to get themselves educated to the highest standard, and the innovations and diversification of subjects—all these factors have combined to swell the demand for additional outlay on education. Around the middle of the Seventh Plan a programme (1985-1990) for the fulfillment of the basic needs was launched, under which the goal was set for making primary education available to all children of the age group 6-10, and for maximizing the literacy rate. Arrangements were also made for separate allocations of expenditure to different levels of national education.

**Primary Education:** His Majesty's Government has adopted variety of measures to enlist the enrolment of the children of the primary school-going age group. Prominent among them are (a) to make primary education free, (b) to provide cent per cent grants for the salaries of primary school teachers, (c) to make available scholarships to 5 per cent and free school uniforms to 5 per cent of the girl students as an incentive for increasing the number of girl students in primary schools, (e) to
distribute free textbooks to girl students for classes 4 and 5, and (f) to emphasize the appointment of women teachers with the same end in view.

**Secondary Education:** It is the policy of His Majesty's Government to determine the number of teaching posts and to provide grants to meet 75 per cent of their salaries, in the case of lower secondary schools, and 50 per cent, in the case of secondary schools. A decision has also been taken to provide cent per cent grants for the salaries of the secondary school teachers in remote areas. At present the practice appears to be to meet other expenses of the schools from tuition fees and other charges, and to erect school buildings, procure furniture, and make other capital investments by mobilizing local resources. Higher Education: His Majesty's Government bears the bulk of the amount needed for the offices and campuses under Tribhuban University in the form of annual grants, and provides the campuses in the private sector with non-recurring grants.

Scholarships are granted to 25 per cent of the targeted student enrolment in technical institutes, and campuses under the Faculty of Education in order that intelligent students may get a chance to receive higher education. Under the same scheme, 15 per cent of the students are exempted from the payment of fees. His Majesty's Government also provides grants to Mahendra Sanskrit University to meet all its educational and administrative expenses.

**Technical and Vocational Education:** The country needs different levels of expertise for its development. If the production of high-level technical manpower falls within the jurisdiction of the universities, the production of middle-level and low-level manpower is the exclusive preserve of the Council for Technical Education and Vocational Training. In various parts of the country Technical Education and Vocational Training Centres have been set up, and they are engaged in producing low-level and middle-level technical manpower, though to a limited extent.

The Technical Education and Vocational Training Centres are operating on the basis of the grants made available by His Majesty's Government. They receive assistance from the friendly countries as well. Their operational costs are rather on the high side for technical and other reasons.

**Non-formal Education:** The Ministry of Education and Culture has been
conducting on a limited scale adult education programme through the district Education Inspectorates on a quota basis. Besides, it has been developing, producing and distributing educational materials as required. In this connection, it has received support and cooperation from governmental and non-governmental organizations, and foreign and domestic donor agencies, numbering about 40 in all.

**Special Education:** A number of governmental and non-governmental organizations have tried, each in its own way, to confer education on the blind, the deaf, and other categories of handicapped persons, long before the coming into effect of the National Education System Plan. The Ministry of Education and Culture has stepped in to assume responsibility for special education only since its introduction. A Special Education Council was set up within the Ministry for that purpose. In the schools established under the special education programme general education is given at lower secondary level, followed by vocational training courses. The operational costs of special schools are met out of the grants made available by His Majesty's Government, on the one hand, and the financial cooperation of donor agencies, on the other.

**Governmental Outlay on the Educational Front:** His Majesty's Government's expenditure in the educational sector has been constantly going up. The amount, which stood at Rs. 230,000,000 in FY 1975/76, jumped to Rs. 1,090,000,000 in FY 1985/86. A budget of Rs. 2,100,000,000 was allocated to education in FY 1990/91. The annual rate of increment between 1975/76 and 1990/91 has averaged 8.5 per cent. His Majesty's Government's total annual expenditure over the same period has gone up at the rate of 10 per cent. His Majesty's Government has ear-marked Rs. 3,200,500,000 for the education sector in FY 1991/92, which is 12 per cent of the total expenditure, compared with 10 per cent in the year before. Table 1 below gives the comparison between expenditure in the educational sector and total expenditure of His Majesty's Government.

**Table 1**

<table>
<thead>
<tr>
<th>Total Government Expenditure and Outlay on Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in Rs. '000,000)</td>
</tr>
</tbody>
</table>

161
Another way to measure the magnitude of the effort made by the country in the promotion of education is to compare the investment in the educational field with the gross domestic product. If in 1974/75 0.9 per cent of the gross domestic product was spent on education, it rose to 2.2 per cent in 1988/89. What should here be borne in mind is that this percentage has been worked out on the basis of the governmental expenditure alone. The expenses, incurred by the guardians in the form of tutorial fees, textbooks, transport and uniforms, are also quite high. Also, it does not include the expenses incurred by the private sector and the community. If they are also added, a greater percentage of the gross domestic product will appear to have been spent on education (Table 12 below). A comparison of the total government expenditure with the outlay on education under different five-year plans shows that it amounted to 11.3 per cent during the Sixth Plan (1980/85) and 10.4 per cent during the Seventh Plan (1985/90).

**Programmes of the Educational Sector:** Almost all the integrated village development projects, which are now in operation in Nepal, have educational programmes too. They are separate and distinct from those of the Ministry of Education and Culture. Included in the integrated village development programmes are the improvement of the physical conditions of the schools, conduct of adult education classes, short-term teacher training programmes, and the like.

**Form of Educational Expenditure:** Table 1 below shows appropriation of the regular and development budget for FYs 1990/91 and 1991/92. During the past decade great changes have taken place in the allocation of expenditure to different levels of education. If in FY 1978/79 only 26 per cent of the budgeted amount was allocated to primary education, it rose to 45 per cent in FY 1988/89. This trend continued in FYs 1990/91 and 1991/92 when 48 per cent and 49.3 per cent respectively of the education budget were appropriated to primary education. The budget for secondary education has shown a declining trend. For example, if the amount spent on secondary education in FY 1978/79 stood at 21.4 per cent of the education budget, it came down to 16.3 per cent in 1988/89. It declined to about 15

<table>
<thead>
<tr>
<th>1. Total Expenditure</th>
<th>18,005</th>
<th>18,665</th>
<th>19,791</th>
<th>26,640</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Expenditure on Education</td>
<td>1,742</td>
<td>1,950</td>
<td>2,106</td>
<td>3,205</td>
</tr>
<tr>
<td>3. Ration (in percentage)</td>
<td>9.7</td>
<td>10.4</td>
<td>10.5</td>
<td>12.0</td>
</tr>
</tbody>
</table>
per cent in 1990/91, and to 13.2 per cent in the subsequent year.

Table 2

<table>
<thead>
<tr>
<th>Level</th>
<th>1990/91</th>
<th>1991/92</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Education</td>
<td>48.0</td>
<td>49.3</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>15.5</td>
<td>13.2</td>
</tr>
<tr>
<td>Adult Education</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Higher Education</td>
<td>23.0</td>
<td>28.1</td>
</tr>
<tr>
<td>Technical/Vocational Education</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Educational Administration</td>
<td>9.9</td>
<td>3.7</td>
</tr>
<tr>
<td>(Curriculum/Textbooks, Teacher Training and Women's Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1.6</td>
<td>3.4</td>
</tr>
</tbody>
</table>

In 1978/79 governmental outlay on higher education was 37.1 per cent of the education budget. In contrast to 1982/83, when a little more than 50 per cent of the education budget was spent on higher education, it slumped to 23 per cent in 1990/91. A slight recovery was registered in 1991/92 when it reached 28.1 per cent.

3 Main Problems and Issues

a) Need for Additional Resources: His Majesty's Government has made known its commitment to reforming the educational sector for the achievement of various socio-economic goals. They include the expansion of educational opportunities, the enhancement of the quality of education, the establishment of more universities, the provision of free secondary education by stages, and the enforcement of higher secondary education. All these new programmes are sure to involve additional resources.

b) Level-wise Problems Primary Education: His Majesty's Government is finding it difficult to make permanent arrangements for the payment of the salaries of the teachers of all primary schools, and for bearing all other expenses, arising out of the provision of stationery expenses, distribution of free textbooks, and scholarships. Nearly 50 per cent of the educational expenditure goes to primary education, of which 95 per cent is spent on the salaries of teachers, leaving a negligible amount for the qualitative improvement of education.

Although there is a provision for free primary education, most of the children of the school-going age have remained outside the school system. According to the figures of 1988/89, the primary school enrolment was 74.3 per cent of the particular age
group, and the enrolment proportion of girl students was 55.4 per cent. His Majesty's Government will have to invest a bigger amount, if the enrolment is to be raised to 100 per cent.

According to the accepted policy, textbooks and other educational materials and furniture and other physical facilities are to have been arranged through the enlistment of popular cooperation. But the fact that primary schools are lacking in educational materials and physical amenities is an unmistakable indication that no satisfactory progress has been achieved in that direction.

**Secondary Education:** His Majesty's Government bears a certain amount of the salaries fixed for the secondary school teachers, which are required to meet all other expenses through the mobilization of local resources. But here too, as in primary education, the level of achievement is quite below the mark. According to the statistics of 1988/89, the student enrolment proportion in secondary schools is 32 per cent. Meanwhile, His Majesty's Government has taken the decision to make secondary education free stepwise in order to raise the level of participation. Once it becomes free, the financial responsibility of His Majesty's Government in terms of salary support will go up to a considerable extent.

Tuition fee is the chief source of the income of secondary schools, and free secondary education means that His Majesty's Government will find itself in a position where it will be called upon to shoulder the financial responsibility for the salaries of the entire teaching and administrative staff. On top of that, it may also be required to arrange ways and means for textbooks and other educational materials and furniture and other physical amenities, such as buildings and extensions, and their repair and maintenance.

**Higher Education:** His Majesty's Government is the chief underwriter of Tribhuvan University. The fees charged by the campuses under it are kept at the minimum, and are uniform throughout. The demand for higher education is increasing day by day. If the supply is to keep pace with it, it will necessitate a greater deployment of resources, because, compared to secondary education, its cost factor is very high. In fact, in view of the mounting enrolment pressure, and other educational and administrative problems, the creation of additional universities has become an inescapable necessity, whatever the cost.
Higher Secondary Education: His Majesty's Government has already taken the decision to make sweeping changes in the existing educational system to make room for the higher secondary schools (10+2). The plan to impart higher secondary education of 2 years to SLC pass students has been accepted in principle. Additional investment will, therefore, have to be made to create the infra-structures and to meet the operational costs.

Technical and Vocational Education: Technical education and vocational training programmes have to be expanded to increase the supply of basic level and middle-level technical manpower to make up for the existing shortfall, even though it calls for a higher level investment. Technical and vocational education is provided through several technical schools. They do not charge any fees, but provide scholarships instead. In the urban areas the number of applications for enrolment is far in excess of the available seats. The unit cost of such institutions
has been inflated by (a) the provision of scholarships, and (b) their residential character.

**Adult Education:** The literacy rate of the country, which stood at 36 per cent of the population in 1990, is estimated to have reached 39 per cent at present, and the aim is to raise to 67 per cent by the year 2000. During recent years the Ministry of Education and Culture has been spending less than one per cent of the budget on adult education programmes. The greater contribution to this area has been made by different non-governmental organizations and integrated village development programmes now in operation in several districts. In their zeal for diffusing adult education they have also utilized the educational materials at the disposal of the Ministry of Education and Culture. It has been felt on all hands that the amount set aside by the government for adult education is most inadequate.

**Principal Recommendations**

1) His Majesty's Government should provide additional financial resources for the achievement of different goals of educational development, especially the expansion of educational opportunities, enhancement of the quality of education, and implementation of new educational programmes. Although there are signs which indicate that the private sector involvement in education will go up as the years roll by, His Majesty's Government will have to meet the greater part of the cost for at least some more years to come. In this connection, it would be appropriate to allocate 15 per cent of the total budget to the education sector.

2) As the amount made available by His Majesty's Government for primary and secondary education is wholly spent on teachers' salaries, alternative sources should be tapped for the qualitative improvement of education. A certain percentage of the amount, locally collected by the District Development Committees and Village Development Committees should be utilized for the extension of educational facilities and improvement in the educational standards.

3) The following arrangements should be made to replace the present system of providing grants on the basis of the number of the teacher's posts:
a) To provide school grants through the District Education Offices:

b) To maintain the status quo in respect with schools which are already in receipt of grants:

c) To provide annual lump-sum grants to schools that have been opened on the basis of school mapping; and

d) To provide grants to schools opened by the local people, only when they have brought into operation the classes of the prescribed level.

4) If foreign institutions wish to establish in Nepal schools, colleges and other centres of higher learning, they should be allowed to do so, subject to the rules prescribed by His Majesty's Government.

5) District Development Committees, Village Development Committees and Municipalities should be associated with the task of establishing schools, as they are in a position to secure public participation in school-level education and its managerial improvement. They should also be obliged to utilize a certain proportion of local taxes to meet the operational costs of educational institutions.

**Level-wise Recommendations**

6) His Majesty's Government should provide the primary schools with grants for the payment of the teachers' salaries and allowances, and to meet the stationery expenses.

7) Local resources should be mobilized to meet in full the costs of constructing school buildings, procurement of furniture and other capital expenditures with matching grants from His Majesty's Government.

8) The quota of scholarships and other facilities like free school uniforms for girl students of primary and secondary schools should be increased in districts where their enrolment is low.

9) Scholarships and school uniforms should be provided for the children of the backward sections of the society and community who are enrolled in primary and secondary schools.
10) Facilities like non-recurring grants and soft loans should be made available to schools, colleges and other centres of higher learning which are in operation in the private sector and which do not receive regular grants from His Majesty's Government, in support of the conduct, expansion and consolidation of their educational programmes.

11) Arrangements should be made to allow secondary schools to levy charges other than tuition fees, as they have to improve their physical facilities and raise their standards of teaching.

12) The deadline for completing the process of making secondary education free should be set, after carefully looking over its financial implications to His Majesty's Government.

13) The policy of distributing textbooks to primary schools free of cost should be reviewed to ensure that only those who cannot afford the cost get them, and the course books should be made available at confessional rates.

14) Each District Development Committee should set up a District Education Fund with the help of the grants received from His Majesty's Government and the collections raised from its own internal resources, and grants should be made available to schools from this fund.

15) Institutions or individuals who extend financial cooperation and donate movable or immovable properties to schools, colleges and other centres of higher learning should be given tax concessions or suitably honored. A tradition to that effect should be evolved.

16) Teachers and administrative staff of schools, colleges, universities and other centres of higher learning should have adequate work load. Nobody should be appointed to any post merely on the ground that there is a vacancy.

17) It should be the duty of the Higher Secondary Education Council to ascertain the financial obligations, stemming from the expansion of the higher secondary education, and provide grants.

18) Grants to schools should be made available through the District Education Committee, after deciding the educational programme of each of them, the
number of teachers, and the amount of financial grants to be made available to each district.

19) The University Grants Commission should get from His Majesty’s Government the amount required for the operation of universities, and to provide grants to each of them, taking into account their needs.

20) The fees of each higher secondary school and centre of higher learning should be fixed on the basis of the principle of cost-recovery. They should be increased gradually with that end in view.

21) The present arrangement of granting scholarships to those who secure the highest marks in the final examinations should be continued, and special scholarships should be instituted for the benefit of the students, belonging to the backward sections of the society.

22) Various measures can be adopted to bring down the unit cost of technical education and vocational training. Boarders and day scholars should be lumped together to increase the student-teacher ratio. The practice of granting scholarships in urban schools should be abandoned. Even in the rural areas the number of scholarships should be kept down to the minimum. Yet another way of trimming the cost would be to select technical education and vocational training programmes that are less expensive.

23) It is most essential that the scope of technical and polytechnic education be enlarged, if the supply of the middle-level technical manpower, so urgently needed for the economic development of the country, is to keep pace with the demand. As both these types of education are rather costly, His Majesty's Government should provide grants to meet part of the cost.

24) The fact that only about 1000 individuals are studying in the 44 special education schools of the Kingdom is enough to suggest that there is much to be done for the disabled. These schools are costly, yet there is no justification whatsoever for charging fees. It follows, therefore, that the only way to keep them in operation is the provision of governmental grants and the assistance of donor agencies.

169
25) The fees charged in colleges and other centres of higher learning, in particular, should be enough to meet the operational costs, provided that the services rendered are commensurate with them.

26) A scholarship fund should be established at the national level to provide the intelligent but indigent students with the opportunity to receive the highest standard of education, and all national level scholarships should be coordinated and publicized for the information of all students.

27) A non-formal education fund should be established at the national level to assist in the implementation of non-formal education programmes.

28) Each District Education Committee should set up a revolving fund to provide loans to schools and indigent students.
APPENDIX

Estimation of Probable Outlays on Education

The amount required for the implementation of HMG policy on various levels of education is shown in Tables 2-10 below.

The details of the primary education requirements are presented as mentioned in the Master Plan for the Basic Primary Education. Under the Master Plan the amount has been forecast at prices current in 1990/91. The present forecast is presented at prices current in 1991/92, up 10 per cent over the previous year.

It is believed that the different programmes to be launched under the aegis of His Majesty's Government will yield positive results. Hence it is estimated that by the year 2000 the enrolment rate of boys and girls in primary schools will easily reach 114 per cent and 100 per cent respectively.

The number of secondary schools by the year 1995 is projected on the basis of the observed tendency of the student enrolment to rise by 7 per cent on average each year, and the amount needed to keep them in operation has been calculated accordingly. The forecast for the period between 1996 and 2000 is based on unit cost.

According to the policy of His Majesty's Government to make secondary education free by stages, arrangement has been made to provide free education in class 6 in 1991/92. And it is very much on the cards that education in class 7 will be made free of cost in 1992/93. If this trend is kept up, secondary education will be entirely free by 1995/96.

It is assumed that student enrolment in higher education will grow at the rate of 9 per cent each year and the unit cost of higher education appears to be Rs. 5,826 in 1991/92. The forecast of expenditure on higher education is based on these two factors.

In the case of special education the target has been set at imparting primary and secondary education to 62,611 children at the estimated unit cost of Rs. 2,972. The forecast of the amount needed for the special education programme is, therefore, based on these two factors.
According to the target of conferring literacy on 67 per cent of the population by the year 2000, it is estimated that the number of adults to be made literate will total 3,520,000. Similarly, 23,300 children will have to be made literate under the children's education programme. The unit costs of adult literacy programme and children's education programme are estimated at Rs. 325 and Rs. 375 respectively. Hence, the cost forecast for adult and children's education programmes is computed on the basis of their respective unit costs multiplied by the number of adults and children involved. As governmental and nongovernmental organizations as well as national and international agencies are involved in them, it is assumed that His Majesty's Government will bear 45 per cent of the cost, and that the balance will be borne by national and international organizations.

The Eighth Plan aims at producing 3,406 technical manpower within the next five years, the duration of training being to 2 years 5 months. The expenditure on these training programmes is projected on the assumption

1) That the annual output of trained manpower will be at the annual rate of 700,

2) That the duration of training will range from to 2 years 6 months, and

3) That, owing to inflation, the unit cost, which was Rs. 18.598 in 1983/84, will go up to Rs. 36,243.
Table 3
Estimated Expenditure on Primary Education
(Rs.'00,000)

<table>
<thead>
<tr>
<th>Year</th>
<th>No.of Students in thousands</th>
<th>Total Expenditure at 1990/91 prices</th>
<th>Total Expenditure at 1991/92 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>2,833.0</td>
<td>19,580</td>
<td>21,538</td>
</tr>
<tr>
<td>1993</td>
<td>2,917.8</td>
<td>20,608</td>
<td>22,662</td>
</tr>
<tr>
<td>1994</td>
<td>3,006.1</td>
<td>21,511</td>
<td>23,662</td>
</tr>
<tr>
<td>1995</td>
<td>3,098.1</td>
<td>22,209</td>
<td>24,430</td>
</tr>
<tr>
<td>1996</td>
<td>3,194.0</td>
<td>23,596</td>
<td>25,956</td>
</tr>
<tr>
<td>1997</td>
<td>3,294.0</td>
<td>24,572</td>
<td>27,029</td>
</tr>
<tr>
<td>1998</td>
<td>3,398.2</td>
<td>24,734</td>
<td>27,207</td>
</tr>
<tr>
<td>1999</td>
<td>3,507.0</td>
<td>25,626</td>
<td>28,189</td>
</tr>
<tr>
<td>2000</td>
<td>3,620.5</td>
<td>26,493</td>
<td>29,142</td>
</tr>
</tbody>
</table>

Table 4
Estimated Expenditure on Secondary Education

<table>
<thead>
<tr>
<th>Year</th>
<th>No.of Students</th>
<th>Expenditure</th>
<th>10% of Expenditure for Quality Improvement</th>
<th>Total in '00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>845,210</td>
<td>480,251,243</td>
<td>48,025,124</td>
<td>528.3</td>
</tr>
<tr>
<td>1993</td>
<td>930,936</td>
<td>754,925,723</td>
<td>75,492,579</td>
<td>830.4</td>
</tr>
<tr>
<td>1994</td>
<td>1,025,694</td>
<td>942,970,515</td>
<td>94,297,052</td>
<td>1,037.3</td>
</tr>
<tr>
<td>1995</td>
<td>1,130,467</td>
<td>1,192,502,115</td>
<td>119,250,212</td>
<td>1,311.8</td>
</tr>
<tr>
<td>1996</td>
<td>1,215,005</td>
<td>1,259,459,898</td>
<td>125,945,997</td>
<td>1,385.4</td>
</tr>
<tr>
<td>1997</td>
<td>1,305,877</td>
<td>1,331,407,272</td>
<td>133,140,727</td>
<td>1,464.6</td>
</tr>
<tr>
<td>1998</td>
<td>1,403,559</td>
<td>1,487,166,889</td>
<td>148,716,689</td>
<td>1,549.6</td>
</tr>
<tr>
<td>1999</td>
<td>1,508,562</td>
<td>1,491,789,213</td>
<td>149,178,921</td>
<td>1,641.0</td>
</tr>
<tr>
<td>2000</td>
<td>1,621,436</td>
<td>1,581,054,810</td>
<td>158,105,481</td>
<td>1,739.2</td>
</tr>
</tbody>
</table>
Table 5
Estimated Expenditure on Higher Education

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Students</th>
<th>Unit Cost</th>
<th>Total Cost</th>
<th>10 % of Expenditure for Quality Improvement</th>
<th>Total Expenditure in '00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>154,600</td>
<td>5,826</td>
<td>900,699,600</td>
<td>90,069,960</td>
<td>9,908</td>
</tr>
<tr>
<td>1993</td>
<td>153,300</td>
<td>5,826</td>
<td>893,125,800</td>
<td>89,312,580</td>
<td>9,824</td>
</tr>
<tr>
<td>1994</td>
<td>167,000</td>
<td>5,826</td>
<td>972,942,000</td>
<td>97,294,200</td>
<td>1,07,202</td>
</tr>
<tr>
<td>1995</td>
<td>181,600</td>
<td>5,826</td>
<td>1,058,001,600</td>
<td>105,800,160</td>
<td>11,638</td>
</tr>
<tr>
<td>1996</td>
<td>215,500</td>
<td>5,826</td>
<td>1,255,503,000</td>
<td>125,550,300</td>
<td>13,811</td>
</tr>
<tr>
<td>1997</td>
<td>234,700</td>
<td>5,826</td>
<td>1,367,362,200</td>
<td>136,736,220</td>
<td>15,041</td>
</tr>
<tr>
<td>1998</td>
<td>255,600</td>
<td>5,826</td>
<td>1,489,125,600</td>
<td>148,912,560</td>
<td>16,380</td>
</tr>
<tr>
<td>1999</td>
<td>277,800</td>
<td>5,826</td>
<td>1,618,462,800</td>
<td>161,846,280</td>
<td>17,803</td>
</tr>
<tr>
<td>2000</td>
<td>302,800</td>
<td>5,826</td>
<td>1,764,112,800</td>
<td>176,411,280</td>
<td>19,405</td>
</tr>
</tbody>
</table>

Table 6
Estimated Expenditure on Technical Education and Vocational Training

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Students</th>
<th>Unit Cost</th>
<th>Total Cost</th>
<th>10 % of Expenditure</th>
<th>Total Expenditure in '00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1993</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1994</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1995</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1996</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1997</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1998</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>1999</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
<tr>
<td>2000</td>
<td>1,750</td>
<td>36,242</td>
<td>63,423,500</td>
<td>6,342,350</td>
<td>697.7</td>
</tr>
</tbody>
</table>
Table 7
Estimated Expenditure on Special Education

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Students</th>
<th>Unit Cost</th>
<th>Total Cost</th>
<th>10 % of Expenditure</th>
<th>Total Expenditure in '00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1,369</td>
<td>2,972</td>
<td>4,068,668</td>
<td>406,867</td>
<td>44.8</td>
</tr>
<tr>
<td>1993</td>
<td>1,894</td>
<td>2,972</td>
<td>5,628,968</td>
<td>562,897</td>
<td>61.9</td>
</tr>
<tr>
<td>1994</td>
<td>2,619</td>
<td>2,972</td>
<td>7,783,668</td>
<td>778,367</td>
<td>85.6</td>
</tr>
<tr>
<td>1995</td>
<td>3,622</td>
<td>2,972</td>
<td>10,764,584</td>
<td>1,076,458</td>
<td>118.4</td>
</tr>
<tr>
<td>1996</td>
<td>5,010</td>
<td>2,972</td>
<td>14,889,720</td>
<td>1,488,972</td>
<td>163.8</td>
</tr>
<tr>
<td>1997</td>
<td>6,929</td>
<td>2,972</td>
<td>20,592,988</td>
<td>2,059,299</td>
<td>226.5</td>
</tr>
<tr>
<td>1998</td>
<td>9,583</td>
<td>2,972</td>
<td>28,480,676</td>
<td>2,848,068</td>
<td>313.3</td>
</tr>
<tr>
<td>1999</td>
<td>13,254</td>
<td>2,972.000</td>
<td>39,390,888</td>
<td>3,939,089</td>
<td>433.3</td>
</tr>
<tr>
<td>2000</td>
<td>18,331</td>
<td>2,972</td>
<td>54,479,732</td>
<td>5,447,973</td>
<td>599.3</td>
</tr>
</tbody>
</table>

Table 8
Estimated Expenditure on Adult Education

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Adults</th>
<th>Unit Cost</th>
<th>Total Cost</th>
<th>10 % of Total Cost</th>
<th>Total Expenditure</th>
<th>Total to be Borne by HMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>287000</td>
<td>325</td>
<td>93275000</td>
<td>9327500</td>
<td>102602500</td>
<td>46170000</td>
</tr>
<tr>
<td>1993</td>
<td>308000</td>
<td>325</td>
<td>100100000</td>
<td>10010000</td>
<td>110110000</td>
<td>49550000</td>
</tr>
<tr>
<td>1994</td>
<td>332000</td>
<td>325</td>
<td>107900000</td>
<td>10790000</td>
<td>118690000</td>
<td>53410000</td>
</tr>
<tr>
<td>1995</td>
<td>357000</td>
<td>325</td>
<td>116025000</td>
<td>11602500</td>
<td>127627500</td>
<td>57430000</td>
</tr>
<tr>
<td>1996</td>
<td>384000</td>
<td>325</td>
<td>124800000</td>
<td>12480000</td>
<td>137280000</td>
<td>61780000</td>
</tr>
<tr>
<td>1997</td>
<td>413000</td>
<td>325</td>
<td>134225000</td>
<td>13422500</td>
<td>147647500</td>
<td>66440000</td>
</tr>
<tr>
<td>1998</td>
<td>445000</td>
<td>325</td>
<td>144625000</td>
<td>14462500</td>
<td>159087500</td>
<td>71590000</td>
</tr>
<tr>
<td>1999</td>
<td>479000</td>
<td>325</td>
<td>155675000</td>
<td>15567500</td>
<td>171242500</td>
<td>77060000</td>
</tr>
<tr>
<td>2000</td>
<td>515000</td>
<td>325</td>
<td>167375000</td>
<td>16737500</td>
<td>184112500</td>
<td>82850000</td>
</tr>
</tbody>
</table>
Table 9
Estimated Expenditure on Children's Education

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Adults</th>
<th>Unit Cost</th>
<th>Total Cost</th>
<th>10 % of Total Cost</th>
<th>Total Expenditure</th>
<th>Total to be Borne by HMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>58000</td>
<td>375</td>
<td>21750000</td>
<td>2175000</td>
<td>23925000</td>
<td>10770000</td>
</tr>
<tr>
<td>1993</td>
<td>83000</td>
<td>375</td>
<td>31125000</td>
<td>3112500</td>
<td>34237500</td>
<td>15410000</td>
</tr>
<tr>
<td>1994</td>
<td>107000</td>
<td>375</td>
<td>40125000</td>
<td>4012500</td>
<td>44137500</td>
<td>19860000</td>
</tr>
<tr>
<td>1995</td>
<td>131000</td>
<td>375</td>
<td>49125000</td>
<td>4912500</td>
<td>54037500</td>
<td>24320000</td>
</tr>
<tr>
<td>1996</td>
<td>156000</td>
<td>375</td>
<td>58500000</td>
<td>5850000</td>
<td>64350000</td>
<td>28960000</td>
</tr>
<tr>
<td>1997</td>
<td>180000</td>
<td>375</td>
<td>67500000</td>
<td>6750000</td>
<td>74250000</td>
<td>33410000</td>
</tr>
<tr>
<td>1998</td>
<td>204000</td>
<td>375</td>
<td>76500000</td>
<td>7650000</td>
<td>84150000</td>
<td>37870000</td>
</tr>
<tr>
<td>1999</td>
<td>229000</td>
<td>375</td>
<td>85875000</td>
<td>8587500</td>
<td>94462500</td>
<td>42510000</td>
</tr>
<tr>
<td>2000</td>
<td>253000</td>
<td>375</td>
<td>94875000</td>
<td>9487500</td>
<td>104362500</td>
<td>46960000</td>
</tr>
</tbody>
</table>

Table 10
Estimated Available Amount for Educational Sector
1992-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>Total Govt.Expenditure</th>
<th>Amount to be Available for Ed. Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 % of Total Govt.Exp.</td>
</tr>
<tr>
<td>1992</td>
<td>11,668.8</td>
<td>2,655.8</td>
<td>318.7</td>
</tr>
<tr>
<td>1993</td>
<td>12,159.4</td>
<td>2,827.1</td>
<td>339.2</td>
</tr>
<tr>
<td>1994</td>
<td>12,713.3</td>
<td>3,028.3</td>
<td>363.4</td>
</tr>
<tr>
<td>1995</td>
<td>13,344.5</td>
<td>3,254.7</td>
<td>390.5</td>
</tr>
<tr>
<td>1996</td>
<td>14,089.7</td>
<td>3,513.9</td>
<td>421.6</td>
</tr>
<tr>
<td>1997</td>
<td>14,975.7</td>
<td>3,799.3</td>
<td>455.9</td>
</tr>
<tr>
<td>1998</td>
<td>15,739.5</td>
<td>4,071.8</td>
<td>488.6</td>
</tr>
<tr>
<td>1999</td>
<td>16,542.2</td>
<td>4,362.2</td>
<td>523.5</td>
</tr>
<tr>
<td>2000</td>
<td>17,385.8</td>
<td>4,671.6</td>
<td>560.6</td>
</tr>
</tbody>
</table>

Note:

a) Estimation of the GDP and total governmental expenditure from 1992 to 1997 is based on the projection of the National Planning Commission.

b) Estimation of the GDP and total governmental expenditure from 1998 to 2000 is based on the trend of the projection in (a) above.
Table 11
Amount of Expenditure in Educational Sector
(1975-1989)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Expenditure in Educational Sector (in '0,000,000)</th>
<th>Ratio of Expenditure in Ed.Sector to GDP in %</th>
<th>Ratio of Expenditure in Ed.Sector to Govt. Expenditure in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>15.42</td>
<td>0.9</td>
<td>10.2</td>
</tr>
<tr>
<td>1976</td>
<td>22.94</td>
<td>1.3</td>
<td>12.0</td>
</tr>
<tr>
<td>1977</td>
<td>25.35</td>
<td>1.4</td>
<td>10.9</td>
</tr>
<tr>
<td>1978</td>
<td>27.03</td>
<td>1.3</td>
<td>10.1</td>
</tr>
<tr>
<td>1979</td>
<td>31.63</td>
<td>1.4</td>
<td>10.5</td>
</tr>
<tr>
<td>1980</td>
<td>33.06</td>
<td>1.4</td>
<td>9.5</td>
</tr>
<tr>
<td>1981</td>
<td>38.42</td>
<td>1.4</td>
<td>9.4</td>
</tr>
<tr>
<td>1982</td>
<td>51.91</td>
<td>1.6</td>
<td>9.7</td>
</tr>
<tr>
<td>1983</td>
<td>73.40</td>
<td>2.1</td>
<td>10.5</td>
</tr>
<tr>
<td>1984</td>
<td>81.58</td>
<td>2.0</td>
<td>11.0</td>
</tr>
<tr>
<td>1985</td>
<td>80.56</td>
<td>1.8</td>
<td>9.6</td>
</tr>
<tr>
<td>1986</td>
<td>108.70</td>
<td>2.1</td>
<td>11.1</td>
</tr>
<tr>
<td>1987</td>
<td>127.88</td>
<td>2.1</td>
<td>11.1</td>
</tr>
<tr>
<td>1988</td>
<td>148.93</td>
<td>2.1</td>
<td>10.6</td>
</tr>
<tr>
<td>1989</td>
<td>174.17</td>
<td>2.2</td>
<td>9.7</td>
</tr>
</tbody>
</table>


Table 12
Allocation of Expenditure in Educational Sector
(1978-1991)

<table>
<thead>
<tr>
<th>Year</th>
<th>Outlay on Education (in Rs.'0,000,000)</th>
<th>Primary Education %</th>
<th>Secondary Education %</th>
<th>Higher Education %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>27.03</td>
<td>7.30</td>
<td>6.05</td>
<td>9.36</td>
</tr>
<tr>
<td>1979</td>
<td>31.63</td>
<td>8.84</td>
<td>6.77</td>
<td>11.75</td>
</tr>
<tr>
<td>1980</td>
<td>33.06</td>
<td>9.86</td>
<td>7.39</td>
<td>11.84</td>
</tr>
<tr>
<td>1981</td>
<td>38.42</td>
<td>11.42</td>
<td>7.95</td>
<td>15.03</td>
</tr>
<tr>
<td>1982</td>
<td>51.91</td>
<td>16.48</td>
<td>8.67</td>
<td>20.23</td>
</tr>
<tr>
<td>1983</td>
<td>73.40</td>
<td>22.42</td>
<td>11.31</td>
<td>37.08</td>
</tr>
<tr>
<td>1984</td>
<td>81.58</td>
<td>30.71</td>
<td>11.21</td>
<td>31.41</td>
</tr>
<tr>
<td>1985</td>
<td>80.56</td>
<td>32.19</td>
<td>14.50</td>
<td>30.83</td>
</tr>
<tr>
<td>1986</td>
<td>108.70</td>
<td>44.24</td>
<td>18.88</td>
<td>41.45</td>
</tr>
<tr>
<td>1987</td>
<td>127.88</td>
<td>46.73</td>
<td>19.67</td>
<td>36.56</td>
</tr>
<tr>
<td>1988</td>
<td>148.93</td>
<td>68.62</td>
<td>21.57</td>
<td>37.97</td>
</tr>
<tr>
<td>1989</td>
<td>174.17</td>
<td>77.92</td>
<td>28.38</td>
<td>38.14</td>
</tr>
<tr>
<td>1990</td>
<td>195.00</td>
<td>96.71</td>
<td>33.25</td>
<td>46.59</td>
</tr>
<tr>
<td>1991</td>
<td>207.87</td>
<td>100.30</td>
<td>32.60</td>
<td>48.53</td>
</tr>
</tbody>
</table>

Table 13
Allocation of the Estimated Expenditure in Educational Sector
(in Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary &amp; Others</th>
<th>Secondary</th>
<th>Higher Secondary</th>
<th>Technical Vocational</th>
<th>Special Education</th>
<th>Non Formal</th>
<th>Teacher Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>53.9</td>
<td>13.2</td>
<td>24.8</td>
<td>1.7</td>
<td>0.1</td>
<td>1.4</td>
<td>4.8</td>
</tr>
<tr>
<td>1993</td>
<td>51.1</td>
<td>18.7</td>
<td>22.2</td>
<td>1.6</td>
<td>0.1</td>
<td>1.5</td>
<td>4.8</td>
</tr>
<tr>
<td>1994</td>
<td>48.7</td>
<td>21.4</td>
<td>22.0</td>
<td>1.4</td>
<td>0.2</td>
<td>1.5</td>
<td>4.8</td>
</tr>
<tr>
<td>1995</td>
<td>45.8</td>
<td>24.6</td>
<td>21.8</td>
<td>1.3</td>
<td>0.2</td>
<td>1.5</td>
<td>4.8</td>
</tr>
<tr>
<td>1996</td>
<td>44.6</td>
<td>23.8</td>
<td>23.7</td>
<td>1.2</td>
<td>0.3</td>
<td>1.6</td>
<td>4.8</td>
</tr>
<tr>
<td>1997</td>
<td>43.9</td>
<td>23.8</td>
<td>24.0</td>
<td>1.1</td>
<td>0.4</td>
<td>1.6</td>
<td>4.8</td>
</tr>
<tr>
<td>1998</td>
<td>42.3</td>
<td>24.1</td>
<td>25.5</td>
<td>1.1</td>
<td>0.5</td>
<td>1.7</td>
<td>4.8</td>
</tr>
<tr>
<td>1999</td>
<td>41.5</td>
<td>24.1</td>
<td>26.2</td>
<td>1.0</td>
<td>0.6</td>
<td>1.8</td>
<td>4.8</td>
</tr>
<tr>
<td>2000</td>
<td>40.5</td>
<td>24.2</td>
<td>27.0</td>
<td>1.0</td>
<td>0.8</td>
<td>1.8</td>
<td>4.8</td>
</tr>
</tbody>
</table>
12. EDUCATIONAL MANAGEMENT AND INSPECTION

1. Background

Educational management came into being in Nepal with the introduction of modern education. During the Rana regime a Chief General was put in charge of public instruction, and was later named as Director General of Public Instruction. As the education system expanded, he was required to look after Nepali language schools, basic education schools, Sanskrit schools, English high schools, and colleges. A central office was established to distribute salaries to the teachers, working in those institutions.

After the political revolution of 1950/51, a widespread change was brought about in the educational policy of the government. Ministry of Education was instituted to increase the number of schools and to manage the existing educational institutions. Massive changes were made in the administrative structure of education to cope with the fast-growing educational sector, and to manage the new vistas of educational development, opened up by the educational development cooperation programme agreed upon between His Majesty's Government and the government of the United States of America. The Department of Education was widely expanded to conduct new programmes like teacher training, adult education, educational material production, and extension of primary and secondary education.

A new turn was given to the educational administration in connection with the implementation of the National Education System Plan in 1971. The management structure of the education system was almost completely overhauled in pursuit of the principle that the activities of the Ministry of Education should be confined to policy matters, evaluation and follow-up, and that the actual execution of should be handed over to regional offices. Accordingly, new Divisions were created in the Ministry, and the Central Education Department was wound up.

The school inspection system has been in operation in Nepal ever since the ushering in of the modern system of education. Although under the administrative organization of the Rana days there was no policy for expanding the scope of education, an Inspector of Schools was appointed to initiate the practice of monitoring the activities of schools. During the last days of the Rana regime the
country was divided into zones, and Zonal Inspectors were appointed to each of them. Following the political changes of 1951, the post of the Chief Inspector of Schools was created at the 'centre in an obvious attempt to make the school inspection system more effective.

The rapid rise in the number of schools, which was triggered by the revolution of 1950/51, necessitated frequent changes in the Inspection system, and the role of the inspectors was also changed in the context of the changed political conditions. If, during the Rana rule, the main objective of inspection was to control the activities of schools in order to discourage their growth, the main task of the inspectors after 1951 was to provide incentives to the local communities for opening new schools, and to distribute financial assistance to them. Following the division of the country into 14 zones and 75 development districts in 1962 inspection functions received a fresh impetus with the appointment of Zonal Education Officer in each zone and District Education Inspector in each district.

During the three decades between 1961 and 1991 the school administration and inspection system have undergone changes several times. The most far-reaching one was the change that was brought about in connection with the implementation of the National Education System Plan.

Under the National Education System Plan the importance of the role of school inspection was unequivocally recognized, and the school/inspector ratio was also firmly established. The chief of the district education was given the name of District Education Officer, and the posts of secondary school inspectors and primary school inspectors were created in each district, according to the density of schools.

In connection with the implementation of the National Education System Plan, work was undertaken by appointing the requisite number of inspectors and other officers. Besides district offices, regional education directorate was constituted in each development region. A new education Act was brought into effect in 1971, and Rules were framed under it and enforced. Up till 1989 those Rules were amended eight times to introduce timely modifications. The Education Act itself was amended to change the name of the Regional Education Director into Regional Education Inspector, and the District Education Officer Into District Education
Inspector.

Since the introduction of the modern system of education in Nepal, the Department of Education and Ministry of Education have created such offices. Following the establishment of Tribhuvan University, it was given some autonomy to manage the affairs of its campuses. The degree of its autonomy was augmented by Tribhuvan University Act, which was put on the Statute Book as part of the implementation of the National Education System Plan. All the public and private campuses were brought within its purview.

Since then the number of its constituent campuses and private campuses have been on the increase in response to the mounting demand for higher education. According to the provisions of the current Tribhuvan University Act it is a fully autonomous body, and is under no obligation to follow the directives of His Majesty's Government. Another university, Mahendra Sanskrit University, is located in Dang. Although both of them are fully autonomous, financially they are entirely dependent on His Majesty's Government. Only recently a private university has been established near Kathmandu. Known as the Kathmandu University, it was set up in 1991.

2. Present Situation

Any review of the present situation of the educational management in Nepal should take into account the wide changes introduced in this field in 1971. Whatever organizations, institutions, and structures are in operation now, they all owe their existence to the National Education System Plan. Under the systemic transformation which was aimed at by the Plan, the Ministry of Education was to frame policies, take follow-up measures, and make evaluation, and the actual implementation of programmes was to be undertaken by the regional and district-level offices. Similarly, on the higher education front the university was conceived of as a 'federation' of institutes, with the delegation of all powers to the latter Tribhuvan University was given the full responsibility for managing the full spectrum of higher education in the country in accordance with the principle of de-centralization.

No official communiqué has been issued to inform the general public that the principles, on which the structure of educational management and implementation
process was based, have been changed. Nevertheless, they are no longer operative in practice. For this reason it is no easier task to evaluate the effectiveness and efficiency of the management mechanism. The great difficulty lies in finding out a basis for evaluation.

Another important thing is that the form and process of the educational management of the country is only a part of the broader from and process of the management of the country itself. It cannot be isolated from the rest for the analytical purpose. The present educational management system has been looking after more than 20,000 educational institutions of higher, secondary and primary education within the limits set by the economic, political, social and geographic context of the country. The question is, therefore, not one of efficiency, but of the level of efficiency.

While reviewing educational management, a clear line of demarcation must be drawn between higher education and school education, because Tribhuvan University has been given the complete responsibility for the management aspects of higher education, whereas the Ministry of Education is accountable for the administrative affairs of the schools only. At the beginning, the task of effecting coordination between the schools and higher education was entrusted to the National Education Committee. However, after the amendment to Tribhuvan University Act, the Committee seems to have the coordinating function any longer. Also, it does not appear to have any hand at present in the formulation of educational policies and evaluation of educational programmes.

While reviewing the effectiveness and efficiency of any management system, maximum use of the objective norms should be made. If an individual or a group of individuals sit in judgment on the performance of another individual or group of individuals, the likelihood is there that the verdict may be colored by subjective considerations and sentiments. An analysis of the question what educational management is for, will yield objective criteria for measuring in an objective manner the level of efficiency of educational administration.

To mobilize the available resources to the maximum at the appropriate level in order to fulfil the goals of national education may be regarded as the principal objective of the educational management.
Utilization of the available resources to the maximum at the appropriate level in order to fulfill the goals of national education may be regarded as the principal objective of educational management. The national goals of education are achieved, when all educational activities are carried out according to the prescribed curricula and recommended processes. The administrative machinery of the universities and the organizational form of the Ministry of Education are created to raise the teaching programme to the highest standard. That is their only raison d'être. It follows, therefore, that the effectiveness and efficiency of any educational management system varies in direct proportion to the competence of educational institutions, functioning under it.

Measured on the basis of the accepted indicators, we are forced to draw the conclusion that the efficiency level of the national education management is not very encouraging. Some of the leading indicators are as follows:

a) Between class 1 and class 2, 50 per cent of the children drop out.

b) The students take ten years on average to complete classes 1-5.

c) The achievement level of class 5 students is about equal to class 3.

d) In a year the schools remain open for only half the time.

e) The teachers hold classes for only half the time.

f) Only 40 per cent of the candidates pass the SLC examination on an average.

g) The pass rate in higher education is very low, and two-year courses are generally completed in three years.

h) As the subjects taught in schools and other higher teaching institutions have no relevance to the practical life, it has given rise to the phenomenon of educated unemployment.

i) (1) Educational institutes are not competent enough to produce the manpower, required for the country.

These indicators clearly underline the fact that the efficiency level of the national education management is not up to the mark. It may be due to many reasons. But these indicators also give ground for believing that the present education management system is riddled with several problems. Since under the present system the Ministry of Education and Culture is responsible for the management of the school-level education, and the universities for higher level education, a review
of the management situation of these two areas would not be out of place here.

Implementation of Plans and Projects: The National Education Committee, which was brought into being in connection with the implementation of the National Education System Plan, has been kept alive even after the implementation phase was over, hoping that it would be of help in educational planning. But it did not involve itself in the continuous process of educational planning, nor was another agency created to do the job. The underlying principles of the National Education System Plan fell by the roadside one after the other. No reform was made in the Plan, taking a bird's eye-view of the whole educational scene. Ad hoc decisions were taken as and when necessary, creating a situation which was not conducive to efficient management.

Unable to hammer out a master plan of its own, the Ministry of Education has to pick up the projects, prepared and presented by external donor agencies for the development of education.

When these projects which have been under implementation since the past decade outside the management framework of the Ministry of Education, are completed, they are not easily absorbed into its general programme. During the implementation stage it is not possible to divert part of the project resources to it raise the management efficiency of the Ministry. It has a Planning Division, but no technical experts to carry out the functions like the evaluation of plan, and the follow-up of projects. For all these reasons, the formulation of plans have to a large extent been influenced by external sources.

Organization and Staffing Pattern of the Ministry: The structure of the Ministry of Education has not changed much, since it was last re-organized with the advent of the National Education System Plan in 1971. At that time the number of primary and secondary schools it had to administer was about 7,000 and 1,100 respectively. Their number has swollen since to about 18,000 and 6,000 respectively. Although it is far beyond the capacity of the existing organization, no attempt has been made to enlarge its size and the various agencies under it may discharge its functions with greater efficiency.

One of the innovations of the re-organization of 1971 was to have a certain
percentage of the officers of the Ministry of Education from the technical service, hoping that they would function as the much-needed source of technical expertise. That hope was belied. Once inducted into the Ministry, they started working like any other administrative officers, allowing the shortage of technical know-how to continue, as if the Ministry had no technical cadre of its own.

Distribution of Powers and Functions and De-centralization of Authority: Under the present management procedure only the Minister and Secretary exercise legal authority. The powers and functions of no other officials have been clearly enunciated. Authority is delegated to keep the administrative machinery running. However, delegation of authority being a matter of discretion for a person who has it, its effect has not been as much positive as it should. There is no detailed job description of the officers and other employees working in the Ministry and the offices under it. That too has cast a negative influence on the evolution of a competent management system.

Under the present administrative process power has been delegated to the regional and district-level chiefs. But there are countless instances where the centre has gone into action in areas where it has delegated power. The District Education Inspectors, who are responsible for the district-level education administration, have a very weak power base. Almost all the powers at the district level are vested in the District Committee. Teacher Selection Board, and the Board of Directors of each school, with the District Education Inspector functioning as the Committee or Board Secretary.

Regional Office: When regional education offices were established the purpose was to assign to them the chief responsibility for executing educational programmes in the regions concerned. In practice, however, the actual implementation was undertaken either by the centre or by the district, putting a question-mark on the very purpose of their existence. Since the chief of each of those offices is called Regional Education Inspector, it is but natural to expect him to function in a manner consistent with his designation, notwithstanding the fact that inspection is a Job which is ordinarily suited to no regional office. And the funds at its disposal are so meager that it is not in a position to carry out any educational programmes. Strangely enough, persons having specialized
competence in the functions of this office are employed elsewhere.

District-level Offices: District-level offices, which should be highly competent and efficient to bring educational management to the full pitch of effectiveness, are themselves at present in a weak state of health for the following reasons, among others:

1) The Ministry of Education has had at times to fight hard to keep the district-level education offices within its fold. On several occasions during the past 30 years they have been placed under the Ministries of Home, Panchayat and Local Development. Even now they do not appear to have been able to extricate themselves wholly from the sphere of influence of the Chief District Officer.

2) There has been no change in the number of positions created after the re-organization of 1971, although, in the meanwhile the number of schools has increased threefold.

3) The physical facilities at the disposal of the district offices are very poor. Most of them operate from rented premises.

4) The post of District Education Inspector belongs to the administrative service. At present 70 out of 75 such posts are filled up by acting appointments for two reasons. First, this position is not sought after by the officials, belonging to the administrative cadre; and, secondly, the Ministry of Education holds the view that they should be manned by technical personnel.

5) The District Education Inspectors, who have to carry out the decisions of various committees and boards, have no chance to develop their own initiative.

The main function of each District Education Office is to conduct the affairs of the schools in the district in an effective manner. But they approach this very task with indifference.

Another important function of this office is to systematize the service of the teachers and to arouse in them positive attitude towards their profession. But it is not competent enough to maintain an up-to-date record of the teachers.
Compared with their work-loads, the budgets made available to the District Education Offices are quite inadequate. Most of them are forced to take out money from the District Education Fund to defray the regular office expenses' and to keep them going, knowing full well that the bulk of the Fund is made up of the amount sanctioned for the salaries of the teachers.

The District Education Committees have been created since 1971 with a view to strengthening educational management at the district level. But they have not been able to deliver the goods, because their structure, functions and Jurisdiction are not suited to the task for which they have been constituted.

The district-level Teacher Selection Boards, as they are constituted now, are not suitably attuned to give a good performance, although the provisions relating to them have been amended several times. In consequence, the choice and appointment of teachers leave much to be desired.

Board of Directors: As popular participation has been at the base of the spread of school education in Nepal, the boards of directions appear to have been an integral part of educational management. But a number of amendments were introduced in the Education Rules to change the mode of their composition with considerations which were not purely educational. Hence, the desired cooperation has not flown from them. The formation, functions and powers of the board of directors should be reviewed to reform them suitably.

Headmaster: Experience of the past has made it quite obvious that the present provision for headmaster is not appropriate. The following may be cited as examples:

a) (a) At the secondary level there is the provision for a headmaster who draws a salary. equivalent to a gazetted second class officer. This post is filled up by promotion from among the teachers. But there is no guarantee that a competent teachers must possess all the attributes of a competent headmaster. And if, by ill-luck, an incompetent person gets elevated to the post of headmaster, the path of progress of that school may be effectively blocked.

b) Primary schools have no provision for a separate post of headmaster. One of the teachers is appointed as a headmaster, with an additional allowance of thirty rupees a month. As this amount is too small for the responsibilities which he has to shoulder as the headmaster. It is an honor which is more often shunned than sought after.
c) The education and other development of a school revolve round the abilities of the headmaster. Yet, ironically enough, there are no special arrangements for training a person who works in such a crucial post.

Management of Higher Education

Tribhuban University Act 1971, which came into force in the wake of the National Education System Plan, has entrusted that academic body with full responsibility for the management of higher education. In accordance with this Act all the institutes of higher learning were placed under it. But a change has come over this policy since 1991. As two new universities have already come into being a new pattern of the management of higher education should be worked out and put into effect.

The successive amendments to Tribhuban University Act have introduced a centralized form of administration, flatly contradicting the earlier concept that the university was a 'federal union' of autonomous institutes. The continuing 'explosion' of higher education has brought things to such a pass that it has been found unable to conduct regular classes in its constituent campuses, and to enrol students in time. To defer examinations and to delay the publication of their results have become its normal features.

For various reasons the management aspects of Tribhuban University are in complete disarray. For instance, the appointment of teachers does not seem to follow any fixed pattern. The extent of its autonomy is so wide that it leaves no room for His Majesty's Government to issue any directives, although the latter has an equally high stake in the efficient management of higher education in the country. His Majesty's Government has no control over its financial transactions, even though the latter depends to the extent of 90 per cent on the financial grants of the former. As the university has long since been in the habit of taking up new programmes every year which entail additional financial involvement, it finds itself in the middle of a financial crisis at the end of the day. And every year His Majesty's Government has to rush to its rescue with a bigger package of grants.

Tribhuban University has become a by-word for centralized administration, as is borne out by the powers delegated to the central Department Chiefs, Deans of the Faculties, and the Campus Chiefs. In any management hierarchy posts are created to match the workload. Its magnitude is determined by the scope of its competence,
and the posts are stratified according to the degree of their responsibilities. The way in which people were promoted in 1990 by taking into consideration nothing except the years of service is a clear proof that Tribhuban University adheres to no known principles of management.

3. Some Prominent Problems and Issues Facing Educational Management

A review of the present state of educational management brings to the fore some issues. Some of them have theoretical overtones, while others belong to the management aspects. Some points at issue are:

1) Should the Ministry of Education and Culture confine itself to making plans, framing policies, and evaluating and following programmes, or should it also get directly involved in the implementation of programmes?

2) Should the decision-making process involve, as at present, eight levels from the Section Officer to the Minister, or should it be abridged?

3) Should the regional offices be retained in the administrative hierarchy with some specific functions, or should they be folded up?

4) Should the district-level education administration be kept as it is, or should it be made fully responsible with more power-sharing?

5) Should the board of directors be retained or abolished?

6) Should the present system of appointing headmasters be kept up, or should a new arrangement be introduced to take its place?

7) Should the present pattern of the management of higher education be continued, or should it be substituted by a new system?

8) Should the management of Tribhuban University remain centralized as at present, or should it be de-centralized?

9) What steps should be initiated to manage Mahendra Sanskrit University?

10) What policies should be framed to govern the private sector schools, colleges and universities?
11) Should the expanding education management sector be kept direct under the sway of His Majesty's Government or should autonomous bodies be created to keep it away from sphere of its direct administration?

4. Inspection System

The educational inspection system, as it exists now, was kept in place in course of the implementation of the National Education System Plan of 1971. Three years later, when its mid-term review was held, it was declared ineffective, and several reform measures were recommended. Prominent among them were as follows:

1) To divide the districts into inspection units under one secondary schools inspector *each*, with the primary schools inspectors assisting him;

2) To appoint the teachers as inspectors and education officers for some time;

3) To appoint inspectors as technical assistants to the District Education Officers, not as administrators;

4) To the capability of the inspectors, and to arrange to have them go in for B.Ed. courses: and

5) To reinforce the Inspection Section of the Ministry of Education and Culture, and to require it to conduct training programmes for the inspectors.

In 1980 the UNESCO's IIP studied and assessed the educational inspection system of Nepal. It came up with the finding that the system failed to produce any appreciable impact because the inspectors lacked experience and training. They could not command any respect from the teachers because their educational skill was below par. Another problem was that competent teachers were not keen on taking up this kind of job. Some of the reformative measures put forward in the report were:

1) The officials who inspect primary and secondary schools should belong to the same category.

2) Inspection being an arduous task, the persons undertaking it should be provided with vehicles and sleeping-bags, among other things.
3) The daily allowances payable to the inspectors should be quite substantial.

4) Periodic in-service training should be organized for the inspectors.

Present Status of Inspection System: A monthly lump-sum allowance was made available to the inspectors to make up for the inadequacy of the daily allowance, and to relieve them from the botheration of having the bills scrutinized and settled. They were ordered to be on inspection tours for 26 days of the month. They were also required to stay in the prescribed area. But the outcome of the mandatory measures was not positive. They failed to produce the desired impact.

The inspectors were put through a professional training course of three months at most to build up their expertise. But it did not succeed in generating any palpable change in their inspectorial conduct. They are observed to harbor the grievance that, the the post of District Education Officer being administrative, it is filled up by individuals with the administrative background, with no interest in the educational activities of the inspectors. To redress this grievance, about half of the District Education Officers were appointed from among the headmasters of secondary schools on a contract basis. Even now around 90 per cent of the District Education Inspectors are at work in secondary schools, without any visible impact on the school inspection system.

The contention of the District Education Officers was that they had no time to spare for educational activities, as they had to remain involved most of the time in petty administrative details. The boards of directors of the schools were, therefore, empowered to give temporary appointment to the teachers, and to transfer them. But that too proved ineffective in releasing the inspectors from the clutches of administrative functions.

One thing is certain that educational inspection at the moment is at a very low ebb be it at central, regional or district level. At the central level the Curriculum, Textbook and Inspection Development Centre has an inspection unit, which has gone into hibernation some years since. Not so surprisingly, it has no information on how many inspectors are at work in which district. Equally not surprising is the fact that over the past decade it has not conducted a single training course for the inspectors.
The Regional Education Inspectorates are equally relaxed in having the schools inspected. and most of the inspectors and trainers, deputed for vocational training and inspection, are engaged in other offices. As per current rules the allowances, payable to the inspectors of primary and secondary schools, are very low. Indeed, they are so paltry that, if nobody is fired with the enthusiasm to go on inspection tours, that cannot be considered as an instance of the shirking of responsibility.

Inspectors were appointed in 1971, taking into account the number of schools in operation then. The number of schools has doubled, and even tripled, since then, but the number of inspectors has not been increased in proportion. The school-inspector ratio in some districts is given in Table 1 below.

### Table 1

<table>
<thead>
<tr>
<th>District</th>
<th>S.School</th>
<th>S.Inspector</th>
<th>P.School</th>
<th>P.Inspector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathmandu</td>
<td>353</td>
<td>7</td>
<td>461</td>
<td>5</td>
</tr>
<tr>
<td>Chitwan</td>
<td>107</td>
<td>3</td>
<td>272</td>
<td>6</td>
</tr>
<tr>
<td>Tanahu</td>
<td>117</td>
<td>3</td>
<td>327</td>
<td>6</td>
</tr>
<tr>
<td>Surkhet</td>
<td>60</td>
<td>1</td>
<td>207</td>
<td>5</td>
</tr>
<tr>
<td>Morang</td>
<td>179</td>
<td>3</td>
<td>314</td>
<td>4</td>
</tr>
<tr>
<td>Jhapa</td>
<td>143</td>
<td>2</td>
<td>283</td>
<td>3</td>
</tr>
</tbody>
</table>

In a country like Nepal, where the terrain features are so harsh, external inspection alone will not do. The headmasters, too, ought to have been made responsible for the job. But no steps have ever been taken to train them. Every school has a board of directors, one of whose functions should have been to carry out inspections from time to time. But no seminars have ever been held to enlighten its members about its functions and responsibilities. And they themselves are happy and contented with exercising what administrative powers they have.

Due to the inadequacy and ineffectiveness of the inspection system nation-wide, the Seti Project, which is actually an educational project for village development, has put to use a separate inspection system of its own. The common feature of the Seti Project and Primary Education Project is to select one school as a resource school, or resource centre, to play the leadership role. Although they differ in some respects in the way they mobilize the resource centre, they have some points of similarity, too.
For example, both of them place in one group 10 or 15 schools which are within the walking distance of 4 to 5 hours, and a centrally located, well-equipped school is regarded as a resource centre. Under the Primary Education Project a lower secondary school, or even a primary school is in some places treated as a resource centre, and is assigned the responsibility for inspecting the schools, literacy classes, women's educational programmes, and educational home classes within its radius. It is also entrusted with the task of establishing rural study centres, holding meetings on educational calendars, training the members of the board of directors, headmasters and other teachers, organizing primary teacher training programmes, and distributing educational materials.

As has been stated above, the two projects differ in some respects in the utilization of resource centre. For example, under the Sett Project one particular person is not designated as a resource person. The whole responsibility lies on the selected school, and the monthly salary payable to a secondary school teacher is handed over to the school itself. On the contrary, the Primary Education Project appoints as resource person an individual who is equal to a secondary school teacher, and he is given the responsibility for the various functions. The Sett Project does not construct a separate resource centre building. It provides the school with some funds to extend its building, whereas the Primary Education Project erects the resource centre buildings. Table 2 below shows the difference of outlays between the two projects.
Table 2
Comparison of Expenditure
Between Seti Project and Primary Education Project

<table>
<thead>
<tr>
<th></th>
<th>Seti Project</th>
<th>Primary Education Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Operational</td>
<td>Rs.40,033 approximately</td>
<td>Resource Centre Building Construction</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td>about Rs.300,000</td>
</tr>
<tr>
<td>Establishment cost</td>
<td>about Rs. 19,000</td>
<td>Equipment about Rs.80,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operational Expenses about Rs.53,000</td>
</tr>
</tbody>
</table>

Obviously these inspection systems are more expensive than the current national mechanism. But they have certainly improved the system. Some of improvements are

a) That schools are inspected regularly;

b) That the standards of the educational achievement are high;

c) That the relationship between the schools and the community has become closer; and

d) That the training programmes conducted by the resource centres are more relevant and effective.

5. Problems and Issues Relating to Inspection

School management and school inspection are like the two wheels of a chariot. Their common objectives are to ensure that the affairs of the schools are conducted smoothly in order to achieve the national goals of education by raising the standards of national education. However, under the present management system educational administration has been alienated from educational functions. All such functions have been relegated to the inspectors. The end and aim of educational administration, which is to keep the schools running smoothly, has been treated as a matter of no consequence. The greatest problem is that the real place and true meaning of inspection in the educational context have been understood by none of those whose business it is to do so.

It is not yet clear as to who is responsible for school inspection. It has yet to be understood that it is a collective responsibility in which the district education inspectors, education inspectors, boards of directors, and headmasters share and
share alike. All of them have to work together to make the whole process a success. But, unfortunately, none of them have a full appreciation of this.

Numerous attempts have been made in the past to improve the inspection system and make it more effective. But all of them were foredoomed to failure, because they were not grounded on serious study, and were undertaken at random. If a real improvement is to be made in this sector, we have to find the right answers to some basic questions. The more important of them are the following:

a) Since the inspection system is not working properly at the central level, it is not clear which unit at the centre should be entrusted with the job? Should a new Inspection Section be created in the Ministry of Education, or should the existing mechanism be strengthened? The options may be many.

b) Should the primary and secondary school inspectors be kept separate as of now, or should they be merged into one to perform both the jobs?

c) If the inspection systems evolved under the Seti Project and Primary Education Project are deemed fit for nation-wide application, which one should be selected?

d) If a resource person is to be fitted into the inspection system, should he be appointed as a teacher or as a civil servant?

e) To what extent should the District Education Committee and Board of Directors be made responsible for school inspection? How much responsibility should a headmaster bear for school inspection?

6. Recommendations

1) Power should be delegated down to the implementation level or unit, if the national education management is to be made more effective.

2) Needless levels should be eliminated from the management hierarchy, and the decision-making process should be as much shortened as possible. To begin with, a memorandum should be required to cross not more than three levels before it reaches the decision-maker.

3) The organization of the Ministry of Education and Culture should not be unnecessarily widened or extended, and its functions should be limited to matters like formulation of policies and plans, and follow-up and assessment of
programmes. Actual execution of programmes should be shifted from the centre to the regional and district offices.

4) The Ministry of Education and Culture should undertake research and development works on its own or commission appropriate agencies to undertake them as part of the ceaseless effort to make educational administration more efficient and efficacious.

5) A high-level and permanent National Education Advisory Council should be constituted to advise the Ministry of Education and Culture on different aspects of national education in place of the National Education Committee, which should be dissolved, as it has no useful role to play to the changed educational context.

6) A University Grants Commission should be formed for the framing of policies to make coordination, follow-ups and evaluations of programmes and various Councils should be appointed to look after the higher secondary education, technical and vocational education, Non-formal education, and special education. The functions and powers of all these high-level bodies should be laid down by law, and the existing Higher Secondary Education Act should be suitably amended.

7) The present Planning Division should be consolidated. Besides, a Project Coordination and Implementation Division and a Primary Education Division should be created.

8) The Curriculum, Textbook and Inspection Development Centre should be re-organized as Curriculum and Textbook Development Centre, charged with preparing curricula and textbooks from the primary to the higher secondary level.

9) A National Education Development Centre should be established with responsibilities for training all educational administrators, such as inspectors, headmasters, technical officers, and specialilsts. It should also arrange for training the trainers at the regional and district-level, apart from carrying out research and development works.
10) The Examination Control Office/Board should be gradually evolved into an autonomous body, and the SLC examination should be conducted in each of the five development regions.

11) A Non-formal Education Centre should be set up, charged with the responsibility for preparing educational materials and trainer-teachers required for this sector.

12) The present Radio Education and Teachers Training unit should be built up as a Distance Education Centre and the scope of distance education should be extended.

13) Full academic autonomy should be conferred on all the universities and centres of higher learning that are in the offing all over the Kingdom. However, in all matters other than educational and academic they should function within the national education policies of His Majesty's Government.

14) The name of Regional Education Inspector should be changed into Regional Education Director, and each Regional Directorate should be made responsible for drafting educational plans, holding examinations for the appointment of primary secondary and higher secondary teachers, organizing training programmes for teachers, trainers, inspectors, and other educational specialists, and assisting in the conduct of SLC examination at the regional level.

15) The name of District Education Inspector should be changed into District Education Officer, and it should belong to the technical cadre.

16) All the 75 districts of the Kingdom should be classified as a., b. and c. according to the density of schools, and positions should be created accordingly.

17) Priority should be given to the construction of district education offices, along with provision of other essential physical amenities.

18) Each District Education Office should be required to update the record of the teachers, to appoint, transfer and promote them, to provide them with pensions and gratuities, to have the schools inspected on a regular basis, to maintain the necessary facts and figures relating to schools, to hold examinations of class 5
19) Each district should have a District Education Committee, empowered to operate standard schools at the district level. Its formation, powers and functions should be laid down by law. Its principal functions should be to operate schools, to receive funds from His Majesty's Government and other sources for providing grants to the district schools, to map out the district schools, to draft district-level educational plans, and to award incentive prizes to the district schools.

20) Schools of every category should each have a Board of Directors. In the case of primary schools, however, a single board of directors may be constituted to look after the affairs of all those that lie within the jurisdiction of a Village Development Committee.

21) The board of directors should consist of 5 to 7 members in the case of a primary school, while in the case of others it should comprise 9 to 11 members. Its membership should include the founder of the school, the guardians, educationists, social activists, donors, and representatives of the District Education Office. Its chairman should be nominated by the District Education Office. The headmaster of the school concerned should be its ex officio member-secretary. The board of directors should be entitled to provide the physical facilities of the school, to safeguard and augment school assets, and to recommend the appointment, transfer and promotion of teachers, besides rewarding and punishing them.

22) Every school should have a headmaster, whose appointment, functions and powers should be as prescribed by the rules.

23) A teacher should be appointed headmaster for a specific period, and he should be allowed to revert to his previous position on completion of his term.

24) Arrangements should be made to prepare special courses of pre-service and in-service training for the headmasters.
25) Necessary steps should be taken to guarantee the job security of teachers, and to maintain the dignity of the teaching profession.

26) The system whereby a teacher is compelled to serve on a provisional basis should be put an end to.

27) His Majesty's Government should prescribe the minimum academic qualification and training required for each grade of teachers.

28) Inspection should not be viewed in isolation from curriculum and training. All three of them should be viewed in their totality. For this purpose an Inspection Coordination Committee should be set up at the centre to perform all functions regarding curriculum, training and inspection. Inspection should be regarded as a tool for realizing the objectives, embodied in the curricula.

29) All necessary arrangements should be made for the management of Sanskrit schools, for the development of their curricula and textbooks, and inspection.

30) At the central level the National Education Development Centre should organize pre-service and in-service training for inspectors on a regular basis.

31) Each Regional Education Directorate should conduct timely training courses for headmasters to enable them to function as school inspectors.

32) Schools could be divided into groups for inspection purpose at the district level, and an inspector should be appointed for every two such groups, as one inspector one group will be an expensive proposition. The inspectors should be required to reside their stations.

33) A district-level inspector should be provided to assist and cooperate in the inspection of school groups, and he should be provided with a monthly lump-sum daily allowance.

34) The board of directors of each school should be obliged to see that the school is functioning properly and that the teaching is going ahead satisfactorily. Seminars and orientation programmes should be organized to enable them to acquaint themselves well in this respect.
35) Inspection for non-formal education should be provided under each District Education Office in cooperation with the resource centres.

36) Encouragement should be given to local bodies like Village Development Committees and Municipalities, if they wish, on an experimental basis, to make primary education compulsory in their respective areas as part of their contribution to eradicate illiteracy from the society.

37) In support of the programme of stimulating privatization encouragement should be given to the establishment of private schools, colleges, universities, and other centres of higher learning. In this connection, permission should be granted to educational institutions, receiving regular government grants, to convert themselves into nonprofit making bodies, if they wish to do so.
Organizational Form of Educational Management

The responsibility for framing policies and implementing them or having them implemented in the interest of a well-ordered system of education will vest with the Ministry of Education and Culture of His Majesty's Government. It will be headed by the Minister of Education, with the Assistant Minister, the Secretary and other officials helping him in carrying out his functions.

The Ministry of Education and Culture will be the highest central organ to operate, inspect and coordinate different areas of educational activities. Different agencies have been created to manage each sector and level of education. There are, for example, the Higher Secondary Education Council, Technical and Vocational Education Council, Informal Education Council, and Special Education Council. All of them will formulate policies, evolve management systems, monitor teaching, conduct examinations, and enhance the quality of education in the particular fields of their competence. Coordination between the Ministry and the Councils will be effected by the Divisions concerned of the Ministry.

For the development of other areas of education centres have been created such as the Janak Education Material Centre, Science Education Development Centre, Non-formal Education Centre, Education Development and Training Centre, Distance Education Centre, Curriculum and Textbook Development Centre, and the offices of the National Commission for UNESCO. All of them will be responsible to the Ministry, and will develop and implement programmes in the particular fields of their competence.

School management has been organized on the basis of the principle of decentralization, and viewing the district as the focal point of the diffusion of education. For this reason the District Education Office, District Education Committee, and Local Development Committee of each district have been made responsible for school management, with the Local Development Committee bearing the ultimate responsibility. It will work in consultation with the District Education Committee, which will function as the point of contact between the Ministry and the district, besides inspecting the affairs of the schools and issuing directives as required. The Regional Education Directorates will inspect and
coordinate the activities of the district-level management agencies and will issue policy and working directives. Regional SLC examination boards will be constituted in each Development Region to conduct the SLC examination at the regional level on the basis of the principle of de-centralization.

A University Grants Commission will be constituted to make the management of higher education more scientific and systematic. It will assess the educational standards and programmes of the universities and other centres of higher learning and will provide them with grants accordingly. This will be the chief agency for conducting research on the methods of developing higher education in general, and for improving the performance of the universities and other centres of higher learning in particular. Universities will have full autonomy to do whatever they deem fit in the interest of standardizing their educational activities.

Each unit will manage and build up the educational sector for which it is responsible. Besides, the Ministry of Education and Culture will have a high-level National Education Advisory Committee, charged with monitoring the educational situation, and carrying out studies and research, and proposing reform measures, if and where required. It may also review the education system and its underlying policies, and suggest amendments to them.
13. Miscellaneous

(a) Pre-primary Education

1. Background

In the educational history of the modern Nepal the first formal attempt at imparting pre-primary education at the official level was made in 1951 with the establishment of a Montessori School in Kathmandu. Some of its teachers received training in India; while others were sent as far away as Israel in 1962 for the same purpose. A year later it was merged with the Demonstration school (now Laboratory School). An attempt was then made to run children's classes to cater for the needs of the children of the pre-school-going age group.

In this context, a remarkable development took place in 1965, when Children's Homes were organized to launch children's education programmes. The Ministry of Education has initiated the task of preparing curriculum for such programmes since 1968, and an attempt was made to systematize it under the Children's Education Rules, 1972. Since then the Curriculum, Textbook and Inspection Development Centre has been giving training and holding seminars for the headmasters and teachers concerned. The last seminar, in this connection, was held as recently as 1990.

In spite of all these attempts, the contribution of the Ministry of Education and Culture to the development of pre-primary education has not amounted to much. The Nepal National Education Planning Commission (1955) and the Comprehensive National Education Committee (1961) too. have made some recommendations in this connection. But the national development plans have for a long time made no specific mention of the education and development of the children of the pre-primary age group. Programmes for the development of the children below six years of age was included for the first time in the Seventh Plan (1985-90). Whatever the programmes and accomplishments in the field of education of the below-six-year-olds, they may be ascribed to the following factors:

a) The need experienced by the educated working women for some centres where their children would be taken care of:

b) The Day Care Centres set up by some Women's Development Projects:

c) The inclination of some well-to-do families to have their children
admitted from an early age to English-medium schools as a matter of prestige, which has produced a chain effect: and

d) The official policy to privatize education.

At present there are all kinds of programmes and centres in operation for the children of the pre-primary age group all over the country. Some of them are welfare programmes, others are project-based and school-based, while still others are private ventures.

Welfare Programmes: Programmes of this type are conducted in particular by non-governmental organizations. The Children's Welfare Coordination Committee under the Social Service National Coordination Committee monitors and coordinates the activities of the bodies like The Nepal Children's Organization, SOS Children's Village, UCEP, Nutrition Programme, and National Children's Fund. A Bal Mandir (children's home) has been opened in each district under the Nepal Children's Organization, where about 50 children are given nutritious food, and some general children's activities are conducted. The Organization also operates 3 orphanages.

SOS Children's Villages are engaged in the programmes for the orphans. They provide school education, besides child care and education. There are Children's Villages in four places; Kathmandu, Pokhara, Surkhet and Itahari. In this connection mention in particular must be made of the Paropakar (benevolence) Ophanagre, which has the distinction of having provided educational opportunities for the orphans and having set them up in different professions. It operates a secondary school and has plans for branching out in other areas of social welfare.

The Ministry of Labour and Social Welfare has established orphanages in Biratnager, Birgunj, Butwal and Rajbiraj, where food, shelter and general education are provided to 25/30 children each.

Similarly, the Hermann Minor School and Douglas Memorial Centre, constructed in the name of the donors themselves, make available care and education to about 300 children of the oppressed classes and backward communities in Kathmandu and Pokhara.

The Nutrition Programme, launched in 1970 under an agreement between His Majesty's Government and World Food Programme, have brought benefit to a large
number of pregnant and nursing mothers along with the below-five-year-olds in 34 districts of Nepal. Besides, the Health Service Coordination Committee under the SSNCC has launched a number of child care and education programmes for the mentally and physically disabled children, including those who are the victims of leprosy. Seven of them are under way in Kathmandu, and four in other places.

The role of the UNESCO in the children's education and uplift has been very remarkable. With its cooperation the Ministry of Health is trying to prevent children's disease and malnutrition. Although such programmes do not have a direct bearing on children's education, their utility cannot be overlooked, because the improvement of the mother's health may have a lasting impact on the well-being of the children.

Project-based Programmes: Under the SSNCC the Women's Service Coordination Committee has initiated several programmes, including literacy, income generation and child care programmes. The child care programme is meant for serving the needs of the working mothers. The Women's Development Division of the Ministry of Local Development also have carried out child care and education programmes in a large number Of districts.

Until now there are about 70 'Day Care Centres in operation in different Village Community Development Project areas. The contributions made by two of them have been most remarkable. They are: the Production Loan Project under the Women's Development Division of the Local Development Ministry. and the Smallholders' Development Project of the Agriculture Development Bank. It may be noted that the Day Care Centres have provided services to approximately 1,800 children of the pre-primary age group.

Private Children's Development Programmes: No accurate figures are available on how many child care and education programmes are in operation in the private sector. Nevertheless, it is estimated that there are not many of them. The children's education centres are known by names like Nursery and K.G. In the three cities of the Kathmandu valley alone there are about 200 of them, and are rapidly spreading out into other urban areas.

These Nurseries and K.Cs. are found to a large extent vigorously teaching different subjects to facilitate the admission of the children to class 1 rather than child development education. Rare are the instances where child psychology is taken into
account to assist the learning process. At the same time, most of them appear to have been actuated more by the commercial motive than by altruism.

School-based Children's Education Programme: Many instances of primary schools have been found where children below six years of age have been admitted to class 1 to the extent of 40 or 50 per cent, and almost all of them stay there for two years. Some schools have what they call children's classes.

It is believed that such a situation has arisen because the internal competence of the present primary education system is very low. Although children's classes have been set up in primary schools, they are not equipped with the requisite components of pre-primary education. In almost all cases the below-six-year-olds are required to follow the curriculum of class 1. There are of course some schools where satisfactory arrangements have been made in respect of pre-primary education, but they are too few, and are almost exceptional. A large number of pre-primary children have been absorbed into the school system—a trend which can neither be halted nor reversed. This problem cannot be resolved until certain pre-requisites of those schools are duly fulfilled.

3. Main Problems and Issues

From the study of whatever projects there are now under way for children's development and education it has become obvious that, generally speaking, the following problems and issues confront the pre-primary education:

Conceptual Unclarity: In Nepal there is clear concept about what constitutes child care and child education. In this connection, the UNESCO-PROEP has laid down four measuring-rods. They are:

1) The all-round development of a child;

2) The orientation of the child towards those activities which are connected with his developmental interest;

3) The opportunities of natural learning; and

4) The contact of the child with the adults who know how to love and take care of him.
Lack of Direction of the Child Development and Education Programme: Child development and education programmes are oriented towards different directions because they are not coordinated. They lack technical knowledge and have no well-defined objectives, and the programme executives have no adequate contacts and exchange of views.

Preoccupation with the Primary Education: Most of the child development and education programmes are handled in particular by private individuals or groups, who are interested more in needlessly stuffing the children with bookish knowledge for the upcoming primary education than in fostering their all-round growth. This tactics is resorted to, not covertly, but overtly.

Lack of Institutionalized Capability-Building Measures: No institutionalized actions have been taken to build up the capabilities required for implementing pre-primary education programmes. It should be remembered that the kind of skills, needed for preprimary education, are quite distinct and different from those for primary education.

Shortage of Research: Very little research has been mounted on the children of different classes and communities of Nepal. As a result, the drafting of programmes have come up against many difficulties.

Lack of Programmes in Rural Areas: What programmes there are of child education and development, they are all centered on the capital in particular, and the urban areas. They have not filtered down to the villages. Sufficient attention should have been turned to meeting the needs of the children, living in the rural areas, who belong to the pre-primary school-going age group.

Non-relevance to Socio-Cultural Environment: Little or no attention has been given to the socio-economic background of the children in the pre-primary courses now in operation. If the children of tender age do not get a chance of involving themselves in activities which reflect their surroundings, they may find it difficult to build up congenial habits and attitudes in the future.

4 Recommendations
Primary education should be put on the right course to root out illiteracy from the country. It is also equally important that the children be related from the very
beginning with home learning through the medium of pre-primary education. To resolve this interconnected problem various steps will have to be taken, of which some of the more important are outlined below:

1) The objective of pre-primary education should be there to instruct children in accordance with the accepted principles of child psychology relation to these physical, mental and intellectual growth.

2) A one-year pre-primary education should be encouraged in view of the requirement and demand of the community.

3) The four-year-olds who are not fit for admission to primary schools should be deemed eligible for pre-primary education. Pre-primary schools should be kept distinct from child care centres.

4) Pre-primary education should be viewed as a staging ground for class 1, and it should come itself more with the learning by doing than bookish knowledge.

5) The curriculum of pre-primary education should be consistent with the theory and practice of child psychology, in tune with the national culture, and in harmony with the socio-cultural environment of the child.

6) Pre-primary schools should charge fees adequate for the provision of sports goods, reading materials and audio-visual materials.

7) An agency concerned of His Majesty's Government should evaluate, follow up and inspect the activities of pre-primary schools.

8) Encouragement should be given to the creation of pre-primary school facilities in the rural areas, too. Local communities may be interested in such activities.

9) Steps should be taken to have the pre-primary school teachers properly trained, and priority for appointment should be given to persons, particularly women, who are conversant with the mother tongue of the children.

10) Steps should be taken to tap social and community organizations, both internal and external, for the mobilization of financial resources required for the support of various programmes of pre-primary schools.
11) Encouragement should be given to the private sector to conduct pre-primary education on the terms laid down by His Majesty's Government and with the approval of the prescribed agency.

12) Study and research should be mounted on the physical, mental, intellectual and linguistic growth of the children of Nepal.

(b) Private Schools

1. Background

Private or residential, or both categories of schools established since 1951, have gone through numerous turning-points. Until 1971 their number was quite limited and they remained operational under the control and with the assistance of the government like any other teaching institutions. A dramatic change came about in 1981 when the government ceased to extend financial help to them, and a liberal policy was adopted towards their establishment. As a result, their number multiplied rapidly. Under the Education Rules 1989, they were included under the category of community schools 'which survive on popular cooperation and their own resources without any grants-in-aid from His Majesty's Government.'

Over the past few years the private schools have stimulated the interest of the people because, relatively speaking, they have demonstrated their ability to teach the English language, and to get a greater number of their students through the SLC examination. Absorbing around 19 per cent of the ever mounting student enrolment pressure in 1989, they have rendered a signal service to the society. As the multiplication of the number of private schools eases the pressure on government resources to a certain extent, the amount thus saved may be made available to raise the quality of education. There are, however, sonic private schools which, as is widely believed, motivated more by the profit motive than public service. Nevertheless, saving some exceptions, they have to some extent relieved His Majesty's Government of the compulsion to establish and operate high quality schools. They have also checked the outflow of resources to foreign countries. By providing standard schooling at home they have helped create conditions where the indigenous capital is retained within the country.

Main Problems and Issues
The rapid proliferation of the private schools in the past decade calls for a review of the contributions they can make to the national education system and for adoption of appropriate measures as a matter of priority. Of special importance among them are those questions, arising out of their operation. Some of the problems and issues they have generated are as follows:

1) Provision has been made for prescribing additional reference books to assist in the task of enabling the private schools to dispense quality education. But no mechanism has been evolved to check whether they include them among their reading materials and use them in a suitable manner. This question is of particular relevance in the light of the complaint that the number of books they prescribe is far beyond the actual need, over-taxing the capacity of the students, and over-straining the financial capacity of the guardians.

2) His Majesty's Government has adopted a liberal policy towards granting permission to private schools. But some unscrupulous individuals, taking undue advantage of it, have opened schools in all kinds of places, irrespective of whether they have suitable classrooms and adequate playgrounds. Naturally, the kind of education they provide is far below the expected standard.

3) The board of directors of each private school has been given the responsibility for appointing teachers and providing them with salaries and other facilities. But not all of them have been conscientious enough to follow the prescribed norms, nor has the agency concerned of His Majesty's Government been able to maintain requisite surveillance in this regard.

4) There is a growing popular resentment against the private schools that the fees they charge are unconscionably high, that they raise them without serving sufficient notice, and that they levy all kinds of charges without providing the services they claim to provide. No serious attention has been given to finding out whether there is any validity in such complaints, and what steps should be taken to relieve the guardians, if they are valid.
5) Private schools have no sense of accountability. For example, they are not required to place before the guardians and general public a clear statement of account, showing their income and expenditure under different heads.

3. Recommendations

1) Private schools should be divided into two broad categories non-profit making and profit making.

2) Teaching institutions which operate on the collection of fees as prescribed by the board of directors or other special arrangements without looking up to the government for regular grants should be regarded as private schools.

3) Private schools should also be required to adhere to the curriculum as prescribed by His Majesty's Government. They should be allowed to run additional educational courses and prescribe other reading materials, if they so desire.

4) Private schools should be motivated to impart a higher standard of education adopting scientific methods in an appropriate teaching atmosphere, and making use of additional educational materials as prescribed by His Majesty's Government.

5) Private schools should be grouped into different categories, and if a school belonging to a particular category wishes to introduce additional courses, it should be permitted to do so subject to the conditions laid down by His Majesty's Government. It should, in particular, agree to abide by the examination to be conducted by the present SLC Board.

6) The agency concerned of His Majesty's Government should make suitable arrangements for the evaluation, follow-up and monitoring of the educational management and mode of instruction of the private schools, both day and boarding.

7) A list, enumerating the physical and educational requirements for quality education, should be drawn up, and the schools which fulfill them should be granted provisional approval at the first stage.
8) While granting permanent approval, priority should be given to those schools which conform to certain conditions, and which have buildings of their own. Government-approved schools which do not fulfill the minimum requirements should be required to fulfill them within a given time-limit, say, 5 or 10 years, and the permit granted to them should be scrapped, if they fail to meet the deadline.

9) Every school should have a board of directors to manage its affairs. It should include its founder, individuals extending financial assistance to set it on its feet, persons selected by the guardians, the nominees of His Majesty's Government, and the representatives selected by the teachers from among themselves. It should be wholly responsible for the management of the school. Generally speaking, one of the founders of the school head the board of directors, and a person who has made an outstanding financial contribution to its establishment should be appointed member-secretary.

10) A board of trustees may be constituted for private schools, depending on their educational programmes and scope. Individuals assisting in the establishment of schools, contributing to the setting up of perpetual funds, donating immovable properties, and well-known for having contributed to the educational sector may be appointed as members of this board.

11) It should be the policy of His Majesty's Government to allow the private schools to remain under the same form of ownership as heretofore.

12) The fees charged by private schools should be commensurate with the facilities and conveniences they offer.

13) 5 per cent of the seats in private schools should be set aside for the accommodation of intelligent but indigent students free of cost.

14) Private schools should provide salaries, provident funds, gratuities and other facilities to the teachers in accordance with their abilities and on the basis of the rules laid down by His Majesty's Government.
15) Private schools should have their accounts audited every year, and the auditor's reports should be made available to His Majesty's Government and the guardians for information.

16) Private schools not having buildings of their own should set aside a certain amount of their budget every year for the creation of the requisite infrastructures.

17) His Majesty's Government should extend cooperation to approved and operational private schools in acquiring land and getting soft loans for the construction of school buildings, for the procurement of vehicles, educational materials, and other reading materials. It should also help provide training to special education teachers.

18) Generally, approval should be given to private schools to operate where they like on the basis of mapping.

19) His Majesty's Government should encourage and cooperate with the private sector in the establishment of at least one high-grade model school in each Development Region.

20) If an indigenous or foreign individual or institution wishes to set up a pre-primary, primary, secondary or higher secondary school, he/she or they should be allowed to do so in accordance with the terms agreed upon between the individual or institution and the agency concerned of His Majesty's Government.

21) Private schools may be set up and operated under individual ownership. But they should be required to fulfil the conditions laid down by His Majesty's Government.

22) Each private school should for the information of the general public bring out a brochure, giving detailed account of the physical facilities at its disposal, its standard of teaching, the qualifications of its teachers, and the extra-curricular activities it provides.

23) If they are any private schools which do not follow the main features of the national curriculum, they should be obliged to do so.
(c) Curriculum, Textbook and Evaluation

A curriculum is a systematic arrangement of the teaching process through whose medium the national and level-wise objectives of education are sought to be achieved. It embraces what is to be taught, how should be taught, what other educational materials should be used to supplement the subject-matter, and how the result should be assessed. However, at present our attention is mainly centred on textbooks, disregarding the curriculum as a systematic process.

Another fact that must be taken note of is that curriculum is related to time and circumstances, and that it should be modified to bring it in line with the changed time and circumstances. But our curriculum has remained unchanged since so many years. No concrete steps have been taken to find out how relevant the subjects are to the needs of today and what steps should be taken to update and refine them.

This question assumes a greater importance in the democratic atmosphere of today. because the curriculum we devise now should be such as to bring to the fore the genius of the future generation as the members of a society who have their individual inclinations and tastes, who have in them immense possibilities waiting for exploration and exploitation, and who are rich in other individual specialties. To give practical shape to this daunting task what is required in the first place is to modernize the process of formulating and implementing curriculum. For until the whole process is made scientific, teaching will naturally take the form of speech-making, and learning will amount to nothing more than memorizing parrot-like what has been taught in the classroom. Under such circumstances, there should be no wonder if the use of the educational materials are kept at the minimum. and the whole affair is rounded up with an examination held at the end of each academic year.

Following the advent of modern education in Nepal in 1951, the College of Education was established in 1957, and the process of preparing and implementing curricula on modern lines was taken in hand. Later, in 1971 a firm step was taken under the National Education System Plan to systematize the process of curriculum formulation. But that was a one-shot affair, which could not be considered a big success. What is needed now in the light of these various experiences is that the creation and development of curricula should be made more scientific, practical and
The role and competence of the teachers affect the systematization of the curricula to a large extent. There are some subjects or topics which a student can learn on his own; there are others which he finds it easier to learn in small groups; and there are still others for which the big classroom atmosphere is favorable. The teacher should, therefore, know full well which teaching technique to use and when. In other words, it is not enough that a teacher is a good lecturer; he should also be able to play the role of a good organizer and an efficient coordinator, tailoring his subject and method to the age, ability and inclination of the students.

In our present context, the final examination is regarded as the most important and powerful means of controlling the whole activities of all the educational institutions and the factors that enter the teaching exercise, namely, curricula, textbooks and teaching methods. This is specially true in respect of secondary and higher education. This is a traditional, though unscientific, practice, acceptable to everybody. This system is easy to administer and control, provided that one is content to live in the fool's paradise, and think that one examination at the end of the academic year is sufficient to arrive at the objective assessment of the students.

To conduct several examinations in a year implies that there should be regularity in their frequency, that their records should be maintained, and that, if the results are not satisfactory, the teaching methods will have to re-appraised to find out if there are any flaws in them. That kind of botheration and self-doubt can be neatly avoided if examinations are held once a year. However, if examinations or assessments are to be conducted on a regular basis as an integral part of the educational process, that should be viewed as a useful instrument to measure not only the suitability of the teaching method, but it can also play a useful role in refining the curricula and textbooks, and in guiding the entire educational management system along the right path. Hence, the assessment of the accomplishments of the students made regularly and constantly should be regarded as an essential precondition of a sound educational system.

Although some attempts have been made to reform the SLC examination, it cannot be viewed as an effective medium of assessment. All that it does is to see whether they have learnt something 'by rote. It does not turn on the searchlight to discover
whether the examinees have developed the capacity to make use of their knowledge, or whether their reviewing and analytical faculties have been sharpened. What it does, in reality, is to encourage the students to memorize a string of facts and make a parade of them in the course of examination.

Moreover, the SLC examination is not founded on social justice. Nearly 80 percent of the students, completing the lower secondary classes are sent up for SLC examination, where only 30 to 40 percent of them get through. In the whole history of the SLC examination till now there were only two occasions when the pass percentage amounted to about 48. Riddled with so many flaws, its importance cannot even now be denied, simply because it is easy to manage and control, and because it is a time-honored tradition. However, there is no denying the fact that the educational process stands no chance of improvement, until the SLC examination is thoroughly overhauled.

2. Textbooks and Reading Materials

The introduction of formal education in Nepal called for the production of textbooks. The alphabet books, which were in use for the non-formal education, were printed along with other books. The printing trade acquired a new dimension both in Nepal and India. Established in Nepal in 1912 the Gorakha Bhasha Prakashini Samiti, or the Gorakha Language Publishing Committee, pushed forward the task of bringing out textbooks for the schools at the opening round of its career. Slowly, as the Nepali language was accorded a place in the universities of India, literary works received a shot in the arm. However, as prior to 1951 the number of schools in Nepal was very few, encouragement was given to the production of textbooks that were designed to serve the purpose of basic education through the medium of vernacular schools, operating in various districts.

After the dawn of democracy in Nepal in 1951, the number of schools increased rapidly, and in the initial years various publishing houses came into being and played an active role to remove the shortage of textbooks. Books were first printed and then used as textbooks after being approved by the government. Following the establishment of the College of Education, creation and publication of textbooks were taken in hand in 1957 or thereabout. Since the setting up of Tribhuban University, steps had to be taken to produce textbooks for higher education.
His Majesty's Government established a Curriculum Development Centre in 1971 to prepare the curricula and textbooks for the school level, which now bears the name of Curriculum, Textbook and Inspection Development Centre. It was given the task of creating textbooks, whose publication and distribution were entrusted to the Janak Education Material Centre. In this connection, it may be mentioned that different publishers have made valuable contributions to the production and marketing of textbooks for different levels of schools and campuses. Prominent among them was the Sajha Prakashan, the successor to the Nepali Bhasha Prakashini Samiti, which was brought into being in 1965. Several books, brought out independently by the Sajha Prakashan and other publishers were approved as textbooks. Within Tribhuban University, too, a Curriculum Development Centre was constituted in 1973 to provide the textbooks for different aspects of higher education.

Once the policy of having only one agency for the publication of textbooks was put into effect, private publishers could no longer have a role to play. And following the enforcement of the National Education System Plan, new textbooks had to be written to suit the requirements of the new curricula. Similarly, the political change of 1990 necessitated the amendments of many textbooks, and some of them had to be scrapped out altogether.

The monopoly on the production of textbooks has driven some of the publishers out of business, while others have managed to hang on in spite of losses. It must be stated that in Nepal no tradition has yet been evolved to promote the publication of books with the provision of facilities and support to the publishers. The number of printing press has increased tremendously over the past few years, paving the way for the publication of standard textbooks within the country itself. Rising production costs combined with the fact that they have to be imported from abroad have made them more expensive. For this reason, the position of most of the organized, private publishers is not so sound. And the contributions made by them to the production and promotion of textbooks, even under such tiring circumstances, can by no means be overlooked or forgotten.
3. Main Problems and Issues Relating to Textbooks

**Shortage of Textbooks:** The first thing that strikes us when we take an overview of the situation is that there is a shortage of textbooks of all kinds from the school level and above. To think of manufacturing all types of textbooks within the country is neither possible nor practical at the present stage of the development of the country. The practice of importing even school textbooks, especially English-language books, from abroad is still going on. The situation becomes uncomfortable when, for example, books on social sciences are imported, and it is discovered that some of the subject-matters of our own society are not dealt with to the sufficient extent. Over the past few years attempts have been made to use the books imported from India with some modifications to suit our context.

Interestingly enough, some of the indigenous publishers have started bringing out school textbooks. But the speed at which the publication of textbooks for higher education is proceeding is very slow. Also, the Curriculum Development Centre of Tribhuvan University is no exception. Its output falls far short of the actual requirement. Although there has been some improvement in the production capacity in the private sector, it can be described as satisfactory in no way.

**Disinclination to Buy Books:** If the demand for books rises, it will automatically spark off a higher rate of production. In this connection, it may be noted with some satisfaction that the farm community, which forms the bulk of our population, is slowly manifesting signs that they are growing conscious of the immense value of education. But, partly owing to ignorance and partly due to the state of their purse, they do not appear to have been moved by the desire to buy textbooks for their children. As for those who are well off, they too are not so very enthusiastic about spending money on books. Lacking the reading habit, they try to do by borrowing them from neighbors and friends.

Textbooks are there, lying ready for the students. They buy some of them for use at a particular stage of their study. Generally, this stage lasts a year at the lower grades. A thing which has been with him and used for a year becomes his precious personal possession. Since the pages of such a book are replete with events and experiences associated with the learning process, it transforms itself into a thing of permanent interest and lasting value. Hence it would be infinitely better to inculcate the reading
habit so that he may keep his books as a means of stabilizing the knowledge which
he has acquired so painstakingly.

A man who is familiar with only a limited number of books stands no chance of
broadening his horizon of knowledge. At present there is an arrangement under
which all the textbooks needed for classes up to 3 are distributed free of cost to all
students and up to 5 to girl students only in cooperation with foreign donor agencies.
In the case of students living in remote districts, they get free textbooks up to class
5. Unfortunately, however, advantage has been taken of this situation more by those
who can afford to buy books than by those who cannot. The creation of a supply
network, covering the whole of the country, is a costly proposition for the
government. Added to it are the problems of timely delivery and of ensuring that the
books are received by the needy not by the affluent. All these facts give a strong
indication that the present arrangement for distributing textbooks free of cost to the
poor and needy should be reformd.

Medium of Textbooks: Attached with the textbooks is the question of their
medium. When preparing them in Nepali or other languages of Nepal, or English,
some thought should be given to their appropriateness. Although the policy has been
laid down that Nepali should be medium of instruction in higher education,’ the
slackness of implementation, the ambiguity at the stage of planning and direction,
the proliferation of English-medium schools, and the use of English textbooks in
them all these factors have nearly overshadowed the question of Nepali medium.

The quality of education can be enhanced only on condition that the teaching of
English as a subject is made effective, that the mother tongue is used as the medium
of instruction at the primary level, and that Nepali is used as the medium of
instruction at secondary level and above. For this purpose, textbooks should be
manufactured in adequate quantities in Nepali and other languages of Nepal. Nepali
language has been accepted as the medium of instruction for teaching all subjects at
all levels, since not only is it the national language of Nepal, but is also the language
of State business.

However, as textbooks are not available in sufficient quantity in the Nepali
language, it cannot serve as the medium of instruction for higher education, so long
as it does not develop into the language of science and technology with sufficient
number of textbooks written in that language.

Publication: The publishing business has not yet flourished in Nepal to the requisite extent. Books required for primary, secondary and non-formal education are brought out by governmental agencies. The Janak Education Material Centre produces most of the school textbooks. Some of them are produced under various educational projects. Although the Sajha Prakashan, Curriculum Development Centre of Tribhuvan University and some private publishing houses are engaged in producing books necessary for higher education, their quantity is very limited. The publishers show no zeal for bringing out and putting on sale textbooks prescribed for higher education, because the number of students at that level is not sizable and the production cost is on the high side. Even those who are engaged in the publication business do not come out with reprints in time.

Production and Development of Textbooks: It is not that decisions have not been taken on the Production and development of textbooks in Nepal on different occasions. Yet, in spite of the efforts made from some quarters, their condition is not satisfactory. All the textbooks necessary for the schools have been prepared by the Curriculum, Textbook and Supervision Development Centre of Education Ministry. His Majesty's Government, The Primary Education Project has also produced some textbooks and reading materials required for primary education. In particular, the Primary Material Unit of this Project should be commended for publishing some children's literature. But the quality the textbooks and reading materials produced leave much room for improvement. And, obviously, under the changed context brought about by the reinstatement of democracy, many of the textbooks will have to be revised, altered and modified.

The present teaching of the Proficiency Certificate level will have to be shifted to the higher secondary schools, which may create a shortage in the textbooks required for teaching various subjects at that level. If they are prepared in Nepali, they are sure to facilitate and speed up the process of learning. Hence, a planned effort should be made to create books on different subjects for use in higher secondary education.

Realizing the business prospects of books on English subjects some Nepali publishers have started bringing them out. The greater the number of textbooks the
wider the field of choice; and the wider the field of choice the bigger the opportunity for raising the quality of education. The ultimate beneficiaries will be the students who will get standard books at a fair price.

However, the books prescribed for the students are themselves a problem. Wide use has been made of such books in the name of standard teaching. To prescribe additional books is at present a matter of prestige for the schools, even though they are not taught properly. The time for examination comes, even before the teacher has had time to check the work-books which the students were prevailed upon to buy. The satchels, overloaded with the so-called reference books, have come to symbolize what are described as prestigious schools of today.

Enshrined in the Constitution of the Kingdom of Nepal, 1990, is the right to impart education through the medium of mother tongue. For this purpose the prime necessity is to make available textbooks in mother tongues. But such is the situation today that there is a shortage of appropriate textbooks even for the primary classes in the national language of Nepal, which is also the language of State business. There are no textbooks in most of the native languages of Nepal, and there are sonic languages which have no script. Nevertheless, in view of the rights conferred by the Constitution, scholars of the languages concerned should be motivated to prepare requisite textbooks.

Production of books and other reading materials should be promoted to allow the free flow of modern knowledge and latest information into the society. An institutionalized attempt should be made to create, produce and distribute course books, help books, reference books and other varieties of reading materials required for the lowest level of education to the highest. If, on the one hand, the writing, publication and marketing of books by individuals and private institutions have to be encouraged and consolidated, and be made more useful and effective. it is equally important, on the other, to develop the art of writing and publication in the form of models, and to systematize the network of distribution.

Some of the things that are in short supply today are the opportunities for the professional development of writers, editors, translators, illustrators, publishers and printers. There is no arrangement to have them trained. nor are there any awards instituted for the recognition of their best outputs. Likewise, there is no institutional
provision for buying a certain number of published books by way of encouraging the writers and publishers.

4. Recommendations

Curriculum

1) The Curriculum. Textbook and Supervision Development Centre should be evolved into an autonomous and powerful body at the national level, with the inclusion of various experts. It should conduct research, development and creative works on the entire technical aspects of education, such as curriculum, textbook, educational materials, teaching method, inspection technology, and evaluation, filling up thereby the great vacuum in this area. This Centre should be recognized as the most crucial pre-condition for the enhancement of quality education.

2) Curriculum for each level should reflect the national objectives. School curricula should be objective and in harmony with the local surroundings. They should be devised in such a way as to be of practical use to the students.

3) While preparing school curricula, the first thing that should be borne in mind is that it is an unbroken chain, stretching from class 1 to 12. They should mention the objectives, the scope and steps of the subject-matter, and the methods of teaching and assessment.

4) Before finalizing the curricula, they should be subjected to the field tests.

5) As the curricula will be properly utilized only in so far as they prove helpful to the teacher and the taught, special attention should be given to this aspect of the question at the formative stage.

6) The practice of distributing curricula free of cost should be put an end to, and they should be made available by the agency concerned at cost.

7) While developing curricula, and teaching and evaluation methods, emphasizing the importance of democratic values and norms, attention should be focused on the genius, attitude, Inclination and the uniqueness of the individual.
8) The curricula of the modern Nepal should be of a kind to make education meaningful and useful by instilling in the hearts and minds of the students the national aspirations and thoughts on liberty, equality, rights and duties, environment, hygiene and sanitation, population, and the ideals of democracy.

9) As the task of developing curriculum at each level is a continuous process, its creation, implementation, evaluation and refinement should be taken up in a cyclic order. In this process it should be completely revised every 5 years in a manner designed to bring it in line with the changing time and circumstances. Encouragement should be given to study and research for this purpose.

10) The subject committee concerned should be entrusted with the task of standardizing and passing judgment on the suitability of the curricula, textbooks and the reference materials.

11) Since curricula, teaching and evaluation are inter-dependent, each of them should be developed with reference to the other. If their continuity and inter-relationship are firmly set, the percentage of failure may come down dramatically.

12) The private sector should be associated, as much as possible with the manufacture and marketing of education materials, based on local resources and skill, as their use makes the teaching method both effective and interesting.

**Assessment**

13) Every level of evaluation system reveals what and how the teachers teach, what the nature of the learning activities of the students is, and how objective the selection of students in the order of merit is. Hence, it should be taken as a year-long continuous aspect of the educational activity, which is both regular and positive. The best course to follow to this end would be to carry out monthly, bi-monthly and quarterly tests.

14) An educational progress report of each student should be maintained, showing all his curricular and extra-curricular activities.

15) The Office of the Controller of Examination, as it exists now, is in a very pitiful condition in terms of human and material resources, and compared with
the growing requirements of the present time. It should be developed and operated as a powerful, autonomous body capable of reforming the examination procedures. Development works like the creation of a model questions bank, research and preparation of standard questions should be left to the Curriculum. Textbook and supervision Development Centre.

16) Examination and assessment are works which can be performed in a standard manner by experts. So their management and conduct should be handled by experts on the subjects concerned. An expertise should be developed in this area to standardize the whole examination process.

17) Entrance tests should be worked out for admission to non-formal, formal and vocational education.

18) Concrete steps should be taken to set standard questions and conduct suitable tests for admission to higher education.

19) The experts concerned should study and evolve a programme for the revival of the semester system in the years to come. Without it, it would be difficult to induce the involvement and accountability of both the teachers and students.

20) Apart from written and essay-type examinations, variety of testing methods should be applied, such as homework, book review, class work, and viva voce. At the same time, steps should be taken to make the essay type examinations more objective.

21) It would be appropriate to evaluate the student on the basis of monthly, quarterly, half-yearly and yearly examinations.

22) As the evaluation of the students is also an evaluation of the teaching methods, one of the criteria for the evaluation of the teacher should be the accomplishment of the students in the subject he teaches.

23) The present system of compartmental examination should be reformed.

Textbooks and Reading Materials

24) Textbooks should be prepared In accordance with the goals of national education and the level-wise curriculum.
25) Scholars of the languages concerned should be encouraged to prepare textbooks for primary education in various languages of Nepal in the interest of linguistic communities.

26) Teachers' Handbooks, setting forth in an organized and systematic manner, the use of textbooks, teaching procedure, lesson plans and other similar topics, should be prepared and provided to the teachers. Such handbooks should include instructions on the subjects that are to be taught in the mother tongue and the special education classes of the integrated schools.

27) Teachers should be encouraged to write or translate textbooks on different subjects of science and arts. They should be granted leave, financial facilities and prizes and they should also be entitled to receive royalties along with the editors and illustrators.

28) Textbooks and reading materials used in all schools should conform to the curriculum set by the agency concerned of His Majesty's Government.

29) Publication of textbooks should be developed on a competitive basis, and all publishers should be given an equal opportunity. Schools should be left free to choose from among the various sets of textbooks and use them.

30) Publishers should be clearly spell out whether the textbooks, approved by the agency concerned of His Majesty's Government are intended as course books or reference books.

31) Textbooks should be of two types: library edition and student edition. Library edition should be kept in the libraries for the use of the students, and the student edition should be put on sale at concessional rates.

32) If the agency concerned of His Majesty's Government, amends the curriculum wholly or in part, the private publishers should be allowed to bring out course books and help books only after making corresponding changes in them.

**Marketing and Distribution**
33) Textbooks, children's books and other reading materials should be made available to the students from class 1 to 3 out of the collection of the schools against the minimum security deposits.

34) Textbooks meant for schools should be sold at a cheap price and it should be uniform throughout the country.

35) Various charitable societies and philanthropic individuals should be motivated to distribute textbooks and other reading materials free of cost among the womenfolk, disabled persons, and members of the backward communities.

36) Textbooks to be distributed free should be published and handed out by the institutions concerned on a specific basis.

Management and Implementation

37) A National Book Trust should be constituted to promote at the national level textbooks, children's books, literary works, original publications on science and arts, and reference books. It should also be required to coordinate and evaluate the publication of textbooks and other books, besides awarding prizes to writers, editors, translators, illustrators and publishers every year, organizing training and seminars, and holding book exhibitions from time to time.

38) Steps should be taken to buy certain number of standard books, published in the country, as a promotional measure and as a means of imparting dynamism to the spread of education.

39) Textbooks, teachers' handbooks, children's books and other reading materials that are to be distributed free of cost should be made available to the local schools, libraries, and other educational institutions through the medium of the District Education Committee concerned.

(d) libraries

1. Background

In the Nepal of the Rana days the only library worth the name was the Bir Library, deservedly famous for its collection of manuscripts, besides some personal libraries, like the Kaiser Library, Singha Library and Hema Raj Library. None of them were
open to the public. Quite a few public libraries were organized some time before the onset of the Revolution of 1950/51. Notable among them were the Pustak Padhne Dalan, or a hall where books are available for reading, which was opened in 1937 in Tansen, and which was renamed as Dhawala Library in 1947 and shifted to a house of its own; the Sharada Library and Pradipta Library, set up in Kathmandu in 1946: the Mahal Library of Butwal, established in 1947: and the Public Bidya Bhavan (Home of Knowledge) Library, that was brought into being in Dharan in the same year. Some schools, colleges and other educational institutions had libraries of their own. The brightest example was the present library of Tri-chandra Campus immediately after the victorious conclusion of the Revolution, libraries mushroomed in every nook and corner of the country.

The Report of the Nepal National Education Planning Commission of 1954 has for the first time placed before the public in no uncertain terms the fact that every educational institution should have a well-stocked library. The Central Library in cooperation with the U.S.A. has taken up since 1952 the task of setting up and conducting a modern library. However, credit should go to Tribhuban University Central Library for enkindling public awareness about the importance and urgency of having a full-fledged modern library in the country. On the recommendation of the Nepal National Education Planning Commission it gave concrete form to the library service, initiated by the Central Library and evolved itself into a well-organized contemporary library.

2. Present Situation

Nepal has at present many kinds of libraries- public libraries. Tribhuban University Campus libraries, libraries owned by government departments and other organized bodies and libraries operated by foreign institutions. As told they are said to number more than 400. But the condition of most of them is not so happy. It is generally believed that a library is nothing more than a collection of a few books and magazines. It has not yet been realized that, as an institution which provides both the teachers and students with information and knowledge as and when required, a library is an essential pre-requisite of any school, college or other educational body. For this reason, the few libraries we have are more in the form of collection of books than libraries in the proper sense of the term).
It may be noted that the state of health of some libraries has been getting better, and that the library service has also expanded. The Central Library of the Tribhuban University has been of immense value to the students of higher education, and equally noteworthy has been the services rendered by the National Library, Keshar Library and Madan Prize Library of the Kathmandu valley. Viewed from the number of daily visitors and the quality of the service they provide, the British Council, Nepal-India Cultural Centre, and United States Information Service in Kathmandu deserve special mention. The libraries in operation in other municipal areas have also contributed much to fostering the reading habit among the people. Gradually, it has been realized on all hands that the educational and public libraries should be developed as the basic infra-structure of education.

3. Main Problems and Issues

a) At a time when it is universally acknowledged that every educational institute should have a library as its essential component. Most of our schools have not even a small collection of books. The state of libraries in the campuses of the Tribhuban University is somewhat better. Some libraries are added every year. But the number of books and journals they have is not sufficient and the amount of service they render to the teachers and students is not adequate.

b) The condition of the libraries in the country is really pitiable in many respects. Even the high-class libraries are not in a position to provide the necessary service. No new books and magazines are added to them. The service is tardy, and the officials have no expertise. The state of the public libraries is no better than that of the institutional ones. That they were not regarded as the integral components of education and that they were riot viewed as the constituent organs of the educational Institutions in the past years is clearly borne out by the fact that no increase was made in the grants provided for them. A look at the allocation of the education budget will also prove the case with equal force. The basic reason for this state of affairs is the lack of a clear national policy on libraries.

c) If education is to be standardized and made practical through the expansion of basic and primary schools, it is not just sufficient to keep the children tied down to some textbooks. Illustrated children's books are required for building up in them the habit of reading. Every boy or girl cannot afford to buy them. If the children are confined to textbooks alone, the area of their knowledge and experience will be restricted. and it will take a longer time to inculcate in them the habit of reading.

d) Even now the students of secondary schools are found centred on textbooks to a large extent. there is no proper atmosphere to induce them
to select and study appropriate books. The libraries do not have help books relating to their courses of study, and no reference books on different subjects of knowledge, information and skill. Teachers at the lower secondary and secondary levels also need reference books like dictionaries and encyclopedia. If they had access to them, they would have collected the knowledge and information required for enhancing the quality of education.

e) Students moving up to the higher secondary level carry with them the physical, mental and emotional characteristics of adolescence. At that stage they need juvenile literature along the masterpieces of literature and other renowned works. One of the reasons why the academic atmosphere has failed to prevail in the campuses is the shortage of appropriate books and magazines in the libraries. But this state of affairs should not be allowed to continue for long. Libraries should be insisted upon as the essential prerequisite of the higher secondary schools that are to be established in future. Else the students will be deprived of those books which are so important for their self-development, and the quality of education will also be adversely affected.

f) Libraries should form an integral part of the higher education institutions. Not all students can afford to buy all the new books required for graduate classes. Most of them cannot purchase foreign course books, help books, reference books and subject-wise research publications. Students belonging to graduate classes and above and research students stand in need of a well-stocked library. Each of the universities and centers of higher learning should maintain a central library for the use of graduate, post-graduate and research scholars. The faculties and institutes under a university may have their own collection of books and journals, but the university should have a central library for the use of teachers and students and for inter-disciplinary studies. It should be equipped with reading matters on different subjects, including research journals and research papers. It should have a requisite number of reading rooms or cubicles where teachers and students may carry out their studies in relative peace and tranquility. Each of them lend a certain number of books to the teachers and students for a certain duration of time. Present and prospective educational institutions should pay special attention to the management of libraries.

g) The neo-literates who have passed the basic literacy level of primary education should cultivate the reading habit on a regular basis. Otherwise, their new-found skill will bear no fruit. But it may not be possible for each of them to maintain a stock of reading materials. The community should, therefore, be encouraged to set up libraries at different points of the densely populated rural and urban areas. Absence of libraries in such areas may deprive the individual of important information and knowledge.

h) The existing libraries have not been rendering good service to the community, the main reason being that they are not stocked with the books which the readers need. The libraries belonging to the educational
institutes are short of the latest reference materials. School libraries hit by the scarcity of appropriate books to the detriment of both the teachers and students.

The physical amenities of the libraries leave much to be desired. They lack a sufficient amount of furniture and other accessories. The rooms are not well laid out. Another disquieting feature is the shortage of trained personnel. According to a statistical report, there are only 80 persons who are adept in library science in the whole of Nepal. This number is very low in proportion to what libraries we have now. It will, therefore, be seen that the shortage of library science graduates is yet another stumbling-block in the development of Libraries. But the chief culprit is the social attitude towards libraries. They are regarded as matters of so little consequence that they can be looked after by anybody. As a result, even the few who are trained in the library science have drifted away to other fields of employment.

i) Libraries and information services cost money, a lot of money. Quite an amount has to be spent on the procurement of books and periodicals, and foreign exchange may also be involved, especially for the import of research publications and journals. Its recurring expenditure may be as high as, or even higher, than the initial cost.

4. Recommendations

1) The principal objectives of a library should be to instill in the people of all age groups the life-long reading habit for self-improvement, and to assist the formal and non-formal students in the acquisition of knowledge and collection of information through the provision of suitable reading materials.

2) Work should be taken in hand in a planned manner to add by stages to the collection of books of the existing primary and secondary schools in order to evolve them into children's libraries of suitable standards.

3) The primary/secondary and higher secondary schools or colleges to be established should be required to have libraries of suitable standards from the very beginning, and to increase the number of books and magazines every year.

4) The faculties, colleges and departments of each university should be provided with library and information services through the system of centralized library.

5) The faculties, colleges, departments and research centres of each university should be induced to maintain a collection of reference books and reading materials on the subjects of each area of their particular interest.

230
6) Popular participation should be harnessed at the local level for the provision of books and reading materials for the knowledge and information of the neo-literates and other literates.

7) Each Village Development Committee should be encouraged to set up, a reading-room, and each municipality should be motivated to establish a full-fledged library with an adequate stock of periodicals and audio-visual materials.

8) Library and information services should be made available to the targeted groups on payment of suitable fees such fees should be kept at the minimum with the aim of fostering studiousness in the individual and society.

9) The university should establish a Department of Library Science for the production of expert personnel to man the library and information services. Training programme workshops and seminars should be organized to upgrade the working staff of the libraries.

10) A national library should be established at the centre, having all the facilities and conveniences.

11) A unit should be created within the Ministry of Education and Culture of His Majesty's Government to look after the libraries of Nepal.

12) Institutional and public libraries should be periodically evaluated, and the individuals and institutions, contributing to their efficient management and upkeep, should be rewarded every year.

13) Public libraries also should receive suitable grants on a regular basis.

14) Popular participation should be mobilized for the establishment and operation of both the institutional and public libraries, and donations should be solicited from service-minded individuals.

(e) Extra-curricular Activities

Besides the customary class works, students should be exposed to extra-curricular activities for the all-round development of their personality. They include physical, intellectual and creative exercises. The provision of co- and extra-curricular
programmes have been recognized as the most essential mechanism for psychological and intellectual development of the students and the full flowering of their personality. These activities have, therefore, been evolved as an integral part of and a complement of their learning process. In this context, extra-curricular activities should be viewed as activities that should be interwoven into educational programme, making it quite difficult to draw the line of demarcation between them.

The National Education System Plan of 1971 has given prominence to the extra-curricular activities. Accordingly, special units have been created within the Curriculum, Textbook and supervision Development Centre of the Ministry of Education and Culture and Tribhuban University to take care of them. However, the schools and different campuses of the university cannot be said to have carried out these activities in any effective manner.

The schools provide facilities for sporting activities like football and volleyball, and quiz contests, and song and dance competitions are organized off and on. But no tradition has been evolved to make them a regular and organized feature of school life.

An institution like the National Sports Council is preoccupied with professional sportsmen and in the absence of effective coordinating mechanism, it has not been able to contribute to any desirable extent to the extra-curricular activities taking place at the school and university level.

The Nepal Scout has been carrying out its programmes at vault school with a view to promoting the all-round development of the students. It has its branches in all the 75 districts. The scouting master has some years since imparted scout training, but it has lost momentum, owing to the lack of facilities and encouragement.

2. Main Problems and Issues

In a country like Nepal extra-curricular activities should be taken up in such a manlier as not only to facilitate the development of the personality of the students, but also to promote the spirit of social service and to advance the cause of national construction. But as they have not received as nitwit attention as they should have in the present context, certain problems have arisen.

In the interest of the development of the creative faculties of students, practical
exercises and competitive activities should have been the normal features of school life besides regular class works. But activities like acting and dancing competitions, literary symposia, literary competitions, painting competitions, and the editing and publication of wall newspapers and hand-written magazines according to the tastes of the students are not carried out in schools and centers of higher learning in an organized manner.

Sports, gymnastics and The Yoga are not practiced in the educational institutions to an adequate extent in the form of co-curricular and extra-curricular activities for the physical development of the students of different age groups. nor are any tournament held to generate the competitive spirit.

Programmes: for the mental and intellectual development of the students are rarely held in our educational institutions. Some programmes like debating competitions, quiz contests and spelling contests are conducted to some extent in sonic educational institutions. But most of them show no Interest in them.

Different kinds of education outings can be organized to boost up the knowledge, experience and understanding of the students. Matters that cannot be comprehended by reading books and listening to class-room lectures may become crystal clear in the course of observation tours. Depending on the age of the student, a visit to the zoo, museum, places of historical and cultural interest, industrial establishments, or institutions of public importance can do a lot of good. But such excursions are not arranged to the desirable extent and the few programmes that have been taken in hand have not been of much help to the students.

Students should be actively associated with social service works to inculcate in them the spirit of altruism. But it has not so far been possible to inspire the students of different age groups to take part in community activities designed to clean up the areas around their homes and schools. to preserve the shrines, ponds, watering places and recreation spots to lay out and manage flower and kitchen gardens in the school premises, to protect the natural environment and to propagate literacy, public health and family welfare, even though the greatest challenge facing us today is to create an awareness about the increasing trend of environmental degradation and pollution, and the disastrous effects that it may lead unless it is arrested and reversed in line. When we speak of environmental degradation and pollution, it also includes
the surroundings of our cities, townships, settlements and villages.

The central purpose of extra-curricular activities will not be fully served by staging internal competitions at the school, college or university level. They should also be organized on inter-institutional, inter-district and inter-regional basis as required. Such competitive meets may also be arranged with the participation of the educational institutions of the neighboring countries as well. Once concluded such programmes should be evaluated and the educational institutions, students and other individuals connected with the programmes should be rewarded for their outstanding performance.

**Recommendations**

1) The following co- and extra-curricular activities should be conducted in all educational institutions for the development of the creative faculties of the students:

   a) Exercise and competition in the literary compositions of various forms:

   b) The editing and publication of wall newspapers and hand-written magazines:

   c) Painting practice and competition:

   d) Exercise and competition in handicrafts bathed on local materials:

   e) Practice and competitive exhibition of drama, dance and music.

2) Educational institutions should make arrangements for the following activities on a regular basis for the physical development of the students:

   a) Regular practice and competition in various kinds of sports:

   b) Gymnastic and Yoga practice according to the ability of the students:

   c) Involvement in scouting and voluntary and National Cadet course programmes.

3) Educational institutions should stage the following competitions for the mental and intellectual development of the students:

   a) Debating competition:

   b) Quiz contest and

   c) Spelling competition
4) Educational Institutions should organize the following educational excursions for the development of the knowledge, experience and understanding of the students:
   
   a) Observation tour of zoos and museums:
   
   b) Visits to art-as of historical, cultural and natural importance: and
   
   c) Sight-seeing tours of the industrial establishments, institutions of public importance and industrial estates.

5) Educational institutions should encourage the students to take part in the following programmes to enhance their awareness of the importance of social service and environmental protection:

   a) Cleanliness of the schools and their surroundings:
   
   b) Preservation and cleanliness of public places like shrines, ponds, watering places and recreational spots;
   
   c) Layout and maintenance of flower gardens and kitchen gardens in schools:
   
   d) Tree plantation and environmental protection; and
   
   e) Literacy, Public health and family welfare programmes.

6) Educational institutions should put aside a certain sum of money for the conduct of level-wise programmes, for the provision of incentive awards to outstanding performers, for the training of teachers on the management of extra-curricular activities.

7) Schools displaying excellence in extra-curricular activities should be suitably rewarded by way of encouragement.

8) MI extra-curricular activities mentioned in (1), (3) and (4), and some activities in (5) above should be included in all the learning processes, and arrangements should be made to give them some weightage in the internal assessment of the students, as they help fulfil the objectives of the curriculum.

9) One of the criteria for the evaluation of educational institutions should be the effective implementation of extra-curricular activities.

APPENDIX (A)
Composition of Task Forces

(a) Goals and Policies of Education, Manpower, Organization and Fiscal Management

1) Dr. Narottam Upadhyaya, Coordinator
   Faculty of Management, T.U.

2) Mr. Hem Raj Lekhak. Member (Main group)
   District Education Director, Sindhupalchok

3) Mr. Achyut Man Rajbhandari, Member (Main group)
   Faculty of Education T.U.

4) Dr. Tirtha Raj Khaniya, Member
   Birendra Multi-purpose Campus, Bharatpur

5) Dr. Shankar Prasad Pradhan, Member
   Institute of Science and Technology, T.U.

6) Mr. Keshav Prasad Nepal, Member
   Planning Division, Ministry of Education & Culture

(b) Higher Education (General)

1) Dr. Kamal Prakash Malla, Coordinator
   Department of English, T.U.

2) Dr. Mohan Bikram Gyanwali, Member (Main group)
   Institute of Science & Technology, T.U.

3) Dr. Basudev Upreti, Member
   Faculty of Management, T.U.

4) Dr. Prem Raj Pant, Member
   Faculty of Management, T.U.

5) Dr. Ramavatar Yadav, Member
   Curriculum Development Centre, T.U.

6) Dr. Parma Lal Pradhan, Invitee
   Planning Division, T.U.

7) Dr. Shanta Thapaliya, Invitee
   Law Campus, Exhibition Road

8) Mr. Ved Nath Regmi, Invitee
   CERID, Tripureshwar, T.U.

9) Dr. Surya Lal Arnata, Invitee
   CEDA, T.U.

10) Mr. Vishnu Man Shrestha, Invitee
    RECAST. T.U., Kirtipur

11) Dr. Durga Prasad Bhandari, Invitee
    CENAS. T.U., Kirtipur

12) Mr. Upendra Dev Acharya, Invitee
    Prithvinarayan Mul purpose Campus, Pokhara, T.U.

(c) Higher Education (Technical)

1) Dr. Kedar Lal Shrestha, Coordinator
   Institute of Science & Technology, T.U.

2) Dr. Shriram Bhata Mathema, Member (Main group)
   Institute of Engineering, Pulchok

3) Dr. Gopal Acharya, Member (Main group)
   Institute of Medicine, Maharajgunj

4) Mr. Chitta Bahadur Tuladhar, Member (Main group)
   ASCOL Campus, Lainchour

5) Mr. Tej Bahadur K.C., Member
   Institute of Agriculture and Animal Science, Rampur

6) Mr. Netra Bahadur Basnet, Member
   Consultant. Mailidevi

7) Dr. Suclarshan Raj Tiwari, Member
   Institute of Engineering, T.U.
8) Mr. Kapil Chitrakar. Member
   Institute of Forestry

9) Dr. Shiva Prasad Dhaubhadel. Invitee
   Institute of Science & Technology. T.U.

(d) Teacher Training
1 Dr. Birendra Kumar Mallik, Coordinator
   Faculty of Education, T. U.

2. Dr. Vajra Raj Shakya. Member (Main group)
   Faculty of Education, T.U.

3 Dr. Ratna Man Pradhan, Member (Main group)
   Faculty of Education. T.U.

4. Mr. Shankar Laal Singh, Member
   Ministry of Education and Culture

5. Mrs. Shanti Basnet. Member
   Vijaya Memorial Secondary School.
   Dilli Bazaar

6.Mr. Ramesh Narayan Shrestha, Invitee
   Valmiki Campus

7.Mr. Uttam Bahadur Amatya, Invitee
   Ministry of Education & Culture

8.Mrs. Rajbhandari. Invitee
   Mahendra-Ratna Campus. Tahachal

9.Dr. Indra Vilash Adhikari. Invitee
   Faculty of Education. T.U.

10.Dr. Shishir Kumar Sthapit. Invitee
    Faculty of Education, T.U.

11.Dr. Hemang Raj Adhikari. Invitee
    Faculty of Education. T.U.

12.Mr. Keshavananda Giri., Invitee
    Faculty of Pedagogy. T.U.

13.Mr. Batuk Prasad Rajbhandari. Invitee
    Faculty of Education, T.U.

14.Dr. Kedar Man Pradhan. Invitee
    Faculty of Education, T.U.

15.Mr. Buddhi Bajra Bajracharya, Invitee
    Faculty of Education. T.U.

16.Dr. Sarvajna Bhakta Malta, Invitee
    Faculty of Education, T.U.

17.Anirudra Shrestha, Invitee
    Faculty of Education. T.U. Sanothimi

18.Mr. Gopi Natha Sharma. Invitee
    Ministry of Education and Culture

19.Mr. Jaya Ram Giri. Invitee
    Ministry of Education and Culture

20.Mr. Lokendra Man Pradhan, Invitee
    Regional Education Directorate.
    Central Development Region
21. Miss Nani Hira Kanskar, Invitee
   Curriculum. Textbook and Supervision Development Centre. Sanothimi

22. Mr. Ramananda Mishra, Invitee
   Ministry of Education and Culture

23. Mrs. Nilam Basnet, Invitee
   Ministry of Education and Culture

24. Mr. Ramesh Prasad Gautam, Invitee
   District Education Inspectorat• Patan

25. Mr. Arjun Bahadur Bhandari, Invitee
   District Education Inspectorat• Bhaktapur

26. Dr. Nobel Kishor Rai, Invitee
   Faculty of Education, T. U.

27. Dr. Divya Man Karmacharya, Invitee
   Faculty of Education T.U.

28. Mr. Ratna Lal Pradhan, Invitee
   Faculty of Education T.U.

29. Mr. Goutani Dhoj Joshi, Invitee
   Faculty of Education T.U.

30. Dr. Balararn Shrestha, Invitee
   Faculty of Education T.U.

31. Mrs. Komal Badan Ma11a, Invitee
   Faculty of Pedagogy, T.U.

32. Dr. Sundar Shyam Bhagat Mathema, Invitee
   Faculty of Education , T.U.

33. Dr. Panna Lal Pradhan, Invitee
   Planning Division, T.U.

34. Dr. Kedar Nath Shrestha Invitee
   Ministry of Education and Culture

35. Mr. Nagendra Prasad Singh, Invitee
   District Education Inspector. Kathmandu

(g) Pre-primary and Primary Education

1. Dr. Yagya Raj Pant, Coordinator
   Faculty of Education, T.U.

2. Mr. Bimal Lal Shrestha
   Member (Main group)
   Primary Education Project

3. Mr. Shiva Prasad Satyal.
   Member (Main group)
   Valmiki Campus

4. Mrs. Stella Tamang. Member
   Bhrikuti Secondary School. Chabahil

5. Mrs. Ram Badan Joshi Member .
   Curriculum.Textbonk and Supervision Development Centre. Saito( hitni

6. Mr. Rana Bahadur-Thapa.
   Member
   Consultant. Maharajgunj
7. Mr. Girt Raj Joshi.  
Ainar Adarsha Secondary School, Baneshwar  
Member

8. Mr. Hem Chandra Shrestha  
Consultant, Maharajgunj  
Member

Kant i-Ishwari Children’s School Tripureshwor  
Member

10. Dr. Chudamani Bandhu.  
Faculty of Humanities, T.U.  
Invitee

11. Mr. Anil Nepal.  
Invitee

12. Mr. Hart Shankar Manandhar.  
Primary Education Project  
Invitee

13. Mr. Bejuna Joshi.  
Primary Education Project  
Invitee

Primary Education Project  
Invitee

15. Mr. Laxmi Nath Shrestha.  
Primary Education Project  
Invitee

16. Mr. Vishwa Bhakta Shrestha.  
Primary Education Project  
Invitee

17. Mr. Satya Bahadur Shrestha.  
Sell Project  
Invitee

18. Mr. Bindeshwar Prasad Gupta.  
Regional Education Inspectorate, Far Western Development Region  
Invitee

Regional Education Inspectorate, Far Western Development Region  
Invitee

(h) Technical and Vocational Education

1. Mr. Agni Prasad Katie. Coordinator  
Council for Technical Education and Vocational Training  
Coordinator

2. Mr. Bhavani Shankar Subedi  
B.T.T.C., Balaju  
Member (Main group)

3. Mr. Jiban Adhikari,  
CTEVT  
Member (Main group)

4. Mr. Saroj Devkota.  
Institute of Engineering, Pulehok  
Member (Main group)

5. Mr. Ratan Bahadur Tamrakar.  
CTEVT  
Member

6. Mr. Narayan Prasad Bhattarai  
Trade School, Sanothimi  
Member

7. Mr. Rama Dev Bhattarai,  
Cottage & Rural Industry Department  
Member
8. Mr. Tanks Nath Sharma, CTEVT
9. Mr. Pushpa Lal Shrestha, Sanothimi Campus, Sanothimi

(i) Non-formal Education, Remote Education and Special Education
1. Dr. Chuda Nath Aryal, Faculty of Education, T.U.
2. Mr. Dinesh Dhungel, NCO Forum for Community
3. Mr. Prakash Singh Adhikari, Innovative Forum for Community Development, Putalisadak
4. Mr. Radhabar Dhoj Khati, National Education Committee
5. Mr. Dil Bahadur Shrestha, Adult Education Section, M.o.E. & C.
6. Mr. Rameshwar Shrestha, Radio Education Teachers Training Programme
7. Mr. Kiran Sinha, School for the Deaf, Naxal
8. Mr Chij Kumar Shrestha, Invitee

(j) Multiuniversity feasibility Study
1. Mr. Mohan Prasad Lakhe, Coordinator
   Thakurram Multi-purpose Campus, Birgun
2. Dr. Panna Lal Pradhan, Planning Division, T.U.
3. Mr. Sarvsvati Prasad Rimal, Padma Kanya Campus, T.U.
4. Mr. Lokendra Prasad Acharya, Mahendra Multi-purpose Campus, Dharan

(k) Textbook and Reading Material
1. Mr. Trailokya Nath Uprety, Coordinator
   Vice-Chairman National Education Commission
2. Mr. Lokendra Man Pradhan, Invitee
   Examination Control Office, MOEC
3. Mr. Vishwa Nath Aryal, Invitee
   CTSDC Centre, Sanothimi
4. Mr. Dipak Khadka, Invitee
   Ratna Pustak Bhandar
5. Mr. Narayan Sharma Gajurel, Invitee
   Sajha Prakashan (Publication)
6. Mr. Chandra Bahadur Shrestha, Invitee
   Examination Control Office
7. Mr. Anjan, Invitee
   Educational Enterprises, Kathmandu
8. Mr. Arjun Vilash Nitta, Invitee
   Janak Education Material Centre
(I) Library

1. Dr. Trailokya Nath Uprety
   Coordinator
   Vice-Chairman National Education Commission
2. Mr. Puma Prasad Amatya
   Invitee
   Central-Library, Tribhuvan University
3. Mr. Madhusudan Sharma Subedi
   Invitee
   Parliament Secretariat Library
4. Mr. Shanker Nath Ahikari
   Invitee
   Keshar Library, Keshar Mahal
5. Mrs. Shanti Mishra
   Invitee
   Tribhuvan University
6. Mr. Shyam
   Invitee
   National Planning Commission Library, Singha Durbar
## APPENDIX (B)

**OFFICIALS OF THE NATIONAL EDUCATION COMMISION**

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mr. Hem Raj Poudyal</td>
<td>Under-Secretary</td>
</tr>
<tr>
<td>2</td>
<td>Mr. Laxman Udas</td>
<td>Under-Secretary</td>
</tr>
<tr>
<td>3</td>
<td>Mr. Copal Prasad Adhikari</td>
<td>Section Officer</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Mahesh Nath Parajuli</td>
<td>Section Officer</td>
</tr>
<tr>
<td>5</td>
<td>Mr. Shakti Prasad Shrestha</td>
<td>Accounts Officer</td>
</tr>
<tr>
<td>6</td>
<td>Mr. Shreekant Poudyal</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>7</td>
<td>Mr. Jaya Krishna Aryal</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>8</td>
<td>Miss Kamala Singh</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>9</td>
<td>Mrs. Sarbayan Luxmi Mulmi</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>10</td>
<td>Mrs. Kanak Devi Bajrachary</td>
<td>Nayab Subba</td>
</tr>
<tr>
<td>11</td>
<td>Mr. Bijendra Man Bajracharya</td>
<td>Primary School Inspector</td>
</tr>
<tr>
<td>12</td>
<td>Mrs. Ganga Devi Manandhar</td>
<td>Typist</td>
</tr>
<tr>
<td>13</td>
<td>Mr. Puma Gobinda Shrestha</td>
<td>Typist</td>
</tr>
<tr>
<td>14</td>
<td>Mr. Luxmi Bahadur Karanjit</td>
<td>Accountant</td>
</tr>
<tr>
<td>15</td>
<td>Mr. Murari Sharma</td>
<td>Accountant</td>
</tr>
<tr>
<td>16</td>
<td>Mr. Uddav Thapa</td>
<td>Assistant Accountant</td>
</tr>
<tr>
<td>17</td>
<td>Mrs. Sanumaiya Manandhar</td>
<td>Typist</td>
</tr>
<tr>
<td>18</td>
<td>Mr. Rishi Dangol</td>
<td>Assistant</td>
</tr>
<tr>
<td>19</td>
<td>Mr. Ram Bahadur Maharjan</td>
<td>Driver</td>
</tr>
<tr>
<td>20</td>
<td>Mr. Surya Bahadur Lama</td>
<td>Driver</td>
</tr>
<tr>
<td>21</td>
<td>Mr. Chandra Bahadur Lama</td>
<td>Driver</td>
</tr>
<tr>
<td>22</td>
<td>Mr. Purushottam Khanal</td>
<td>Peon</td>
</tr>
<tr>
<td>23</td>
<td>Mr. Bir Bahadur Rana Magar</td>
<td>Peon</td>
</tr>
<tr>
<td>24</td>
<td>Mr. Shim Lal Maharjan</td>
<td>Peon</td>
</tr>
</tbody>
</table>

**THE END**