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**EDUCATION  
AND  
NATIONAL DEVELOPMENT**

**REPORT OF THE  
EDUCATION COMMISSION, 1964-66**

**NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING  
1970**

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29 June 1966

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Dear Shri Chagla,

I have much pleasure in submitting the Report of the Education Commission.

I would like to take this occasion to express to you my own and my colleagues' sincere gratitude for the support and encouragement you have always so generously extended to us in our work. The appointment of the Commission is largely due to your initiative and vision.

Education has always been important but perhaps never more so in man's history than today. In a science-based world, education and research are crucial to the entire developmental process of a country, its welfare, progress and security. It is characteristic of a world permeated by science that in some essential ways the future shape of things is unpredictable. This emphasizes all the more the need for an educational policy which contains a built-in flexibility so that it can adjust to changing circumstances. It underscores the importance of experimentation and innovation. If I may say so, the single most important thing needed now is to get out of the rigidity of the present system. In the rapidly changing world of today, one thing is certain: yesterday's educational system will not meet today's, and even less so, the need of tomorrow.

It is difficult, and it is certainly so for us, to say to what extent the Report will actually help in the reconstruction of the educational system which is so urgently necessary. We trust, however, that the Report will provide some basic thinking and framework for taking at least the first step towards bringing about what may be called an educational revolution in the country. The Report makes recommendations about various sectors and aspects of education. The main points that immediately come to my mind are:

Introduction of work-experience (which includes manual work, production experience, etc.) and social service as integral parts of general education at more or less all levels of education;

Stress on moral education and inculcation of a sense of social responsibility. Schools should recognize their responsibility in facilitating the transition of youth from the world of school to the world of work and life;

Vocationalization of secondary education;

The strengthening of centres of advanced study and the setting up of a small number of major universities which would aim to achieve the highest international standards;

Special emphasis on the training and quality of teachers for schools; Education for agriculture and research in agriculture and allied sciences should be given a high priority in the scheme of educational reconstruction. Energetic and imaginative steps are required to draw a reasonable proportion of talent to go in for advanced study and research in the agricultural sciences;

Development of quality or pace-setting institutions at all stages and in all sectors.

I apologize for the size of the Report. It could have been shorter, but that would have cost more money and time, and delayed action. What the situation urgently calls for is action, and this is what you have always stressed.

With regards,

Yours sincerely,

D. S. KOTHARI

SHRI M. C. CHAGLA

Minister for Education

Government of India

New Delhi

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## FOREWORD

The Education Commission was appointed by the Government of India by a Resolution, dated 14 July 1964, to advise the Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects.\*

We began our task twenty-one months ago, on October 2, 1964, Mahatma Gandhi's birthday. From the very beginning we have been conscious of the immensity and inherent difficulties of the task assigned to us. No task in our view could be more challenging, more vital and relevant to India's progress and development-economic, cultural and spiritual. In facing a task of such colossal magnitude and complexity, there is always a danger that the approach and recommendations may not be sufficiently radical. There is also the other possibility that the recommendations may go beyond the capacity and resources of the nation. The difficulties are greatly accentuated because educational plans are long-term plans, and long-term projections of needs and resources are beset with serious uncertainties. We hope our assumptions about the total resources of the nation over the next 20 years and the proportion to be invested in education are reasonable.

It cannot be gainsaid that the recommendations are inevitably circumscribed by the limits of our knowledge and experience, and by our capacity for bold, constructive and imaginative thinking. We would not claim that the recommendations made by us in the Report are necessarily the best, nor can we be completely certain about the validity of every recommendation that we have made. Again, many of the proposals we make would require investigation and revision in the light of experience. We therefore, lay considerable emphasis on a built-in flexibility in the system of education to facilitate adjustment to changing situations and requirements. There is, of course, one thing about which we feel no doubt or hesitation: education, science-based and in coherence with Indian culture and values, can alone provide the foundation-as also the instrument-for the nation's progress, security and welfare.

Indian education needs a drastic reconstruction, almost a revolution. We need to bring about major improvement in the effectiveness of primary education; to introduce work experience as an integral element of general education; to vocationalize secondary education; to improve the quality of teachers at all levels and to provide teachers in sufficient strength; to liquidate illiteracy; to strengthen centres of advanced study and

\*Legal and medical education were excluded from the purview of the Commission, but it was authorized to look into "such aspects of these problems as are necessary for its comprehensive enquiries".

strive to attain, in some of our universities at least, higher international standards; to lay special emphasis on the combination of teaching and research; and to pay particular attention to education and research in agriculture and allied sciences. All this calls for a determined and large-scale action. Tinkering with the existing situation and moving forward with faltering steps and lack of faith can make things worse than before.

In view of the urgency of the situation, we felt impelled to keep the time-table originally set for the submission of the Report, even if it meant some limitations on the scope of our studies and on the depth and perspicacity of our presentation. If we had more time, the Report could have been shorter and more readable.

The Commission set up twelve Task Forces on (1) School Education; (2) Higher Education; (3) Technical Education; (4) Agricultural Education; (5) Adult Education; (6) Science Education and Research; (7) Teacher Training and Teacher Status; (8) Student Welfare; (9) New Techniques and Methods; (10) Manpower; (11) Educational Administration; and (12) Educational Finance. In addition, it set up seven Working Groups on (1) Women's Education; (2) Education of Backward Classes; (3) School Buildings; (4) School-Community Relations; (5) Statistics; (6) Pre-Primary Education; and (7) School Curriculum. The Task Forces and the Working Groups made a detailed study of many specific problems. Some of these studies will be published separately. The Reports of the Task Forces and the Working Groups have been of great help to us in our work and have enabled us to examine some of the important issues in a depth and detail which would not have been possible otherwise.

We spent about one hundred days in going round all the States and some Union Territories. We visited universities, Colleges and schools and held discussions with teachers, educationists, administrators and students. We convened two conferences of university students' representatives to have the advantage of personal discussion with them about student welfare and discipline. We found these conferences of real value.

We interviewed men and women distinguished in public life, scientists, industrialists and scholars in different fields and others interested in education. Altogether we interviewed about 9,000 persons. We invited written evidence, memoranda and replies to our questionnaires, organized seminars and conferences, commissioned a number of special studies and also conducted a few special enquiries such as the socio-economic background of students admitted to educational institutions, and working days in schools and colleges. The total number of memoranda and notes sent to the Commission was over 2,400.

We had the benefit of valuable consultations with a number of internationally well-known educationists and scientists. We are particularly grateful to Prof P. M. S. Blackett, President of the Royal Society, UK; Lord Robbins, Chairman of the Committee on Higher Education (1961-63), UK; Sir Christopher Cox, Educational Adviser, Ministry of Overseas Development, UK; Sir Willis Jackson, Professor of Electrical Engineering, Imperial College of Science and Technology, University of London; Professor C. A. Moser, London School of Economics; Professor Frederick Spitz, President, National



Academy of Sciences, USA; Dr. James E. Allen Jr., Commissioner, State Education Department and President, University of the State of New York, USA; Professor Edward Shils, University of Chicago, USA; Professor S. Dedijer, University of Lund, Sweden; Recteur J. Capelle, formerly Director-General of Education in France; Professor C. E. Beeby, Harvard University; and Academician A. D. Alexandrov, Rector, University of Leningrad; and Academician O. A. Reutov, Academy of Sciences, USSR.

We had the honour and privilege of meetings with the President, the Vice-President and the Prime Minister. We had most useful discussions with the Minister for Education and some of his Cabinet colleagues and with the Deputy Chairman, Member (Education) and some other members of the Planning Commission. During our visits to the States, the Chief Ministers and Education Ministers as also their colleagues gave us their time generously. Discussions with them were of great value and benefit to us. We had useful discussions with the Secretaries to State Governments concerned with Education, Local Government, Agriculture and Finance. We also had most useful meetings with a large number of educationists, scientists, the President of the Indian National Congress, Members of Parliament and State Legislatures, industrialists and journalists. To all of them, we are deeply grateful.

In setting up the Commission, the Government of India decided to associate with it a number of distinguished educationists and scientists from other countries. Professors H. L. Elvin (UK), Jean Thomas (France), Roger Revelle (USA), S. A. Shumovsky (USSR) and Sadatoshi Ihara (Japan) served as full members of the Commission. Mr. J. F. McDougall (UNESCO Secretariat) served as Associate Secretary throughout the work of the Commission. The Indian members of the Commission would like to record their deep gratitude to the foreign members and to the Associate Secretary. It has enabled us to add considerably to our expertise and insight. While the foreign members have been fully and wholeheartedly associated with the work of the Commission and with the general trend of its conclusions, the responsibility rests primarily with the Indian members in cases where we make recommendations pertaining specifically to Indian problems.

Our Report is divided into three parts.

The first part covers Chapters I-VI. It deals with general aspects of educational reconstruction common to all stages and sectors of education. These include reorientation of the educational system to national objectives, structural reorganization, improvement of teachers, enrolment policies and equalization of educational opportunity.

The second part covers Chapters VII-XVII. It deals with the different stages and sectors of education. Chapters VII-X deal with some aspects of school education such as problems of expansion, curriculum, teaching methods, textbooks, guidance, evaluation, administration and supervision. Chapters XI-XIII deal with problems of higher education which include, amongst others, the establishment of major universities, programmes of qualitative improvement, enrolment and university governance. Chapters XIV and XV deal respectively with education for agriculture and technical and vocational education.

Chapter XVI discusses programmes of science education and research. Chapter XVII deals with problems of adult education.

The third part deals with problems of implementation. It covers two chapters-Chapter XVIII which deals with educational planning and administration and Chapter XIX which deals with educational finance. We realize that many of the things we say here have been said before, notably by the University Education Commission (1948-49). It is worth recalling, for instance, that the Commission laid great stress on education for agriculture and its improvement, yet nothing significant happened. The real need is action. The poignancy of the situation and the grim times we are passing through underscore this simple but vital fact.

We record our gratitude to the State Governments for their generous cooperation in our work through organizing our visits, making the time of busy senior officials fully available to us, readily answering all our questions, preparing memoranda on their educational progress and problems, opening their institutions to our visits and for their hospitality in making our stay in their States useful and pleasant in every way.

We thank the members of our Task Forces and Working Groups and the Secretary, UGC, for their most willing and devoted efforts to deal with complex problems in a realistic and professional manner. Theirs has been a contribution of inestimable value. We are equally grateful to all those who have given evidence, sent memoranda, replied to the questionnaires, and discussion papers and participated in seminars and conferences and given us the privilege of visiting their institutions.

We thank the agencies which carried out special studies and enquiries for us and in particular the National Council of Educational Research and Training, the Institute of Applied Manpower Research, the Indian Law Institute, the State Institutes of Education, and the several Teachers' Associations. These added background to our enquiries which we otherwise would have lacked.

Many educational institutions collaborated in a number of special enquiries which the Secretariat of the Commission carried out. Many more opened their doors to our visits and provided the time and experience of their staff to our discussions. We express our gratitude to all of them.

We owe a special debt to the UGC and the Indian Institute of Public Administration who, at considerable inconvenience to themselves, provided us with the necessary accommodation.

It is a pleasure to record our thanks to the UNESCO, the British Council and the USAID for the services of members and consultants and to the Asia Foundation for a gift of books. We have to thank also the UNESCO International Institute of Educational Planning and the Governments of France, the Federal Republic of Germany and the USSR for financial and other assistance to our team which went abroad for comparative studies.

We thank our Secretariat for their selfless and devoted collaboration. A particular word of thanks goes here to the State Liaison Officers for their unstinted help.

We cannot conclude our acknowledgements without expressing our indebtedness to Shri J. P. Naik, Member-Secretary of the Commission. His unrivalled knowledge of educational problems and statistics and his indefatigable energy have been a source of unflinching strength and inspiration; and we owe more to him than to any one else that the work of the Commission could be brought to completion within the allotted time.

We are grateful to Mr. J. F. Mc Dougall, Associate Secretary of the Commission, for his assistance at all stages of our work.

## NATIONAL POLICY ON EDUCATION

*The Resolution issued by the Government of India on the Report of the Education Commission is reproduced below for ready reference.*

Education has always been accorded an honoured place in Indian society. The great leaders of the Indian freedom movement realized the fundamental role of education and throughout the nation's struggle for independence, stressed its unique significance for national development. Gandhiji formulated the scheme of Basic Education seeking to harmonize intellectual and manual work. This was a great step forward in making education directly relevant to the life of the people. Many other national leaders likewise made important contributions to national education before independence.

2. In the post- Independence period, a major concern of the Government of India and of the States has been to give increasing attention to education as a factor vital to national progress and security. Problems of educational reconstruction were reviewed by several commissions and committees, notably the University Education Commission (1948-49) and the Secondary Education Commission (1952-53). Some steps to implement the recommendations of these Commissions were taken; and with the passing of the Resolution on Scientific Policy under the leadership of Jawaharlal Nehru, the development of science, technology and scientific research received special emphasis. Towards the end of the Third Five Year Plan, a need was felt to hold a comprehensive review of the educational system with a view to initiating a fresh and more determined effort at educational reconstruction; and the Education Commission (1964-66) was appointed to advise the Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects". The Report of the Education Commission has since been widely discussed and commented upon. The Government is happy to note that a general consensus on the national policy on education has emerged in the course of these discussions.

3. The Government of India is convinced that a radical reconstruction of education on the broad lines recommended by the Education Commission is essential for economic and cultural development of the country, for national integration and for realizing the ideal of a socialistic pattern of society. This will involve a transformation of the system to relate it more closely to the life of the people; a continuous effort to expand educational opportunity; a sustained and intensive effort to raise the quality of education at all stages; an emphasis on the development of science and technology; and the cultivation of moral and social values. The educational system must produce young men and women of character and ability committed to national service and development. Only then will education be able to play its vital role in promoting national progress, creating a sense of common citizenship and culture, and strengthening national integration. This is necessary if the country is to attain its rightful place in the comity of nations in conformity with its great cultural heritage and its unique potentialities.

4. The Government of India accordingly resolves to promote the development of education in the country in accordance with the following principles:

**(1) Free and Compulsory Education**

Strenuous efforts should be made for the early fulfillment of the Directive Principle under Article 45 of the Constitution seeking to provide free and compulsory education for all children up to the age of 14. Suitable programmes should be developed to reduce the prevailing wastage and stagnation in schools and to ensure that every child who is enrolled in school successfully completes the prescribed course.

**(2) Status, Emoluments and Education of Teachers**

(a) Of all factors which determine the quality of education and its contribution to national development, the teacher is undoubtedly the most important. It is on his personal qualities and character, his educational qualifications and professional competence that the success of all educational endeavour must ultimately depend. Teachers must, therefore, be accorded an honoured place in society. Their emoluments and other service conditions should be adequate and satisfactory, having regard to their qualifications and responsibilities.

(b) The academic freedom of teachers to pursue and publish independent studies and researches and to speak and write about significant national and international issues should be protected.

(c) Teacher education, particularly in-service education, should receive due emphasis.

**(3) Development of Languages** (a) Regional Languages: The energetic development of Indian languages and literature is a sine qua non for educational and cultural development. Unless this is done, the creative energies of the people will not be released, standards of education will not improve, knowledge will not spread to the people, and the gulf between the intelligentsia and the masses will remain, if not widen further. The regional languages are already in use as media of education at the primary and secondary stages. Urgent steps should now be taken to adopt them as media of education at the university stage.

(b) Three-Language Formula: At the secondary stage, the State Governments should adopt, and vigorously implement, the three-language formula which 'includes the study of a modern Indian language, preferably one of the southern languages, apart from Hindi and English in the Hindi-speaking States, and of Hindi along with the regional language and English in the non-Hindi speaking States. Suitable courses in Hindi and/or English should also be available in universities and colleges with a view to improving the proficiency of students in these languages up to the prescribed university standards.

(c) Hindi: Every effort should be made to promote the development of Hindi. In developing Hindi as the link language, due care should be taken to ensure that it will

serve, as provided for in Article 351 of the Constitution, as a medium of expression for all the elements of the composite culture of India. The establishment in non-Hindi States, of colleges and other institutions of higher education which use Hindi as the medium of education should be encouraged.

(d) Sanskrit : Considering the special importance of Sanskrit to the growth and development of Indian languages and its unique contribution to the cultural unity of the country, facilities for its teaching at the school and university stages should be offered on a more liberal scale. Development of new methods of teaching the language should be encouraged, and the possibility explored of including the study of Sanskrit in those courses (such as modern Indian languages, ancient Indian history, Indology and Indian philosophy) at the first and second degree stages, where such knowledge is useful.

(e) International Languages: Special emphasis needs to be laid on the study of English and other international languages. World knowledge is growing at a tremendous pace, especially in science and technology. India must not only keep up this growth but should also make her own significant contribution to it. For this purpose, study of English deserves to be specially strengthened.

**(4) Equalization of Educational Opportunity** Strenuous efforts should be made to equalize educational opportunity. (a) Regional imbalances in the provision of educational facilities should be corrected and good educational facilities should be provided in rural and other backward areas.

(b) To promote social cohesion and national integration the Common School System as recommended by the Education Commission should be adopted. Efforts should be made to improve the standard of education in general schools. All special schools like Public Schools should be required to admit students on the basis of merit and also to provide a prescribed proportion of free-studentships to prevent segregation of social classes. This will not, however, affect the rights of minorities under Article 30 of the Constitution.

(c) The education of girls should receive emphasis, not only on grounds of social justice, but also because it accelerates social transformation.

(d) More intensive efforts are needed to develop education among the backward classes and especially among the tribal people.

(e) Educational facilities for the physically and mentally handicapped children should be expanded and attempts should be made to develop integrated programmes enabling the handicapped children to study in regular schools.

#### **(5) Identification of Talent**

For the cultivation of excellence, it is necessary that talent in diverse fields should be identified at as early an age as possible, and every stimulus and opportunity given for its full development.

## **(6) Work-experience and National Service**

The school and the community should be brought closer through suitable programmes of mutual service and support. Work-experience and national service, including participation in meaningful and challenging programmes of community service and national reconstruction, should accordingly become an integral part of education. Emphasis in these programmes should be on self-help, character formation and on developing a sense of social commitment.

## **(7) Science Education and Research**

With a view to accelerating the growth of the national economy, science education and research should receive high priority. Science and mathematics should be an integral part of general education till the end of the school stage.

## **(8) Education for Agriculture and Industry**

Special emphasis should be placed on the development of education for agriculture and industry.

(a) There should be at least one agricultural university in every State. These should, as far as possible, be single campus universities; but where necessary, they may have constituent colleges on different campuses. Other universities may also be assisted, where the necessary potential exists, to develop strong departments for the study of one or more aspects of agriculture.

(b) In technical education, practical training in industry should form an integral part of such education. Technical education and research should be related closely to industry, encouraging the flow of personnel both ways and providing for continuous cooperation in the provision, design and periodical review of training programmes and facilities.

(c) There should be a continuous review of the agricultural, industrial and other technical manpower needs of the country and efforts should be made continuously to maintain a proper balance between the output of the educational institutions and employment opportunities.

## **(9) Production of Books**

The quality of books should be improved by attracting the best writing talent through a liberal policy of incentives and remuneration. Immediate steps should be taken for the production of high quality textbooks for schools and universities. Frequent changes of textbooks should be avoided and their prices should be low enough for students of ordinary means to buy them.

The possibility of establishing autonomous book corporations on commercial lines should be examined and efforts should be made to have a few basic textbooks common

throughout the country. Special attention should be given to books for children and to university- level books in regional languages.

### **(10) Examinations**

A major goal of examination reforms should be to improve the reliability and validity of examinations and to make evaluation a continuous process aimed at helping the student to improve his level of achievement rather than at 'certifying' the quality of his performance at a given moment of time.

### **(11) Secondary Education**

(a) Educational opportunity at the secondary (and higher) level is a major instrument of social change and transformation. Facilities for secondary education should accordingly be extended expeditiously to the areas and classes which have been denied these in the past.

(b) There is a need to increase facilities for technical and vocational education at this stage. Provision of facilities for secondary and vocational education should conform broadly to the requirements of the developing economy and real employment opportunities. Such linkage is necessary to make technical and vocational education at the secondary stage effectively terminal. Facilities for technical and vocational education should be suitably diversified to cover a large number of fields, such as agriculture, industry, trade and commerce, medicine and public health, home management, arts and crafts, secretarial training, etc.

### **(12) University Education**

(a) The number of wholtime students to be admitted to a college or university department should be determined with reference to the laboratory, library and other facilities and to the strength of the staff.

(b) Considerable care is needed in establishing new universities. These should be started only after an adequate provision of funds has been made for the purpose and due care has been taken to ensure proper standards.

(c) Special attention should be given to the organization of postgraduate courses and to the improvement of standards of training and research at this level.

(d) Centres of advanced study should be strengthened and a small number of 'clusters of centres' aiming at the highest possible standards in research and training should be established.

(e) There is a need to give increased support to research in universities generally. The institutions for research should, as far as possible, function within the fold of universities or in intimate association with them.



**(13) Part-time Education and Correspondence Courses** Part-time education and correspondence courses should be developed on a large scale at the university stage. Such facilities should also be developed for secondary school students, for teachers and for agricultural, industrial and other workers. Education through part-time and correspondence courses should be given the same status as full-time education. Such facilities will smoothen transition from school to work, promote the cause of education and provide opportunities to the large number of people who have the desire to educate themselves further but cannot do so on a full-time basis.

#### **(14) Spread of Literacy and Adult Education**

(a) The liquidation of mass illiteracy is necessary not only for promoting participation in the working of democratic institutions and for accelerating programmes of production, especially in agriculture, but for quickening the tempo of national development in general. Employees in large commercial, industrial and other concerns should come from the industrial undertakings in the public sector. Teachers and students should be actively involved in organizing literacy campaigns, especially as part of the social and National Service Programme.

(b) Special emphasis should be given to the education of young practising farmers and to the training of youth for self-employment.

#### **(15) Games and Sports**

Games and sports should be developed on a large scale with the object of improving the physical fitness and sportsmanship of the average student as well as of those who excel in this department. Where playing field and other facilities for developing a nation-wide programme of physical education do not exist, these should be provided on a priority basis.

#### **(16) Education of Minorities**

Games and sports should be made not only to protect the rights of minorities but to promote their educational interests as suggested in the statement issued by the conference of the Chief Ministers of States and Central ministers held in August 1961.

#### **(17) The Educational Structure**

It will be advantageous to have a broadly uniform educational structure in all parts of the country. The ultimate objective should be to adopt the 10+2+3 pattern, the higher secondary stage of two years being located in schools, colleges or both according to local conditions.

5. The reconstruction of education on the lines indicated above will need additional outlay. The aim should be gradually to increase the investment in education so as to reach a level of expenditure of 6 percent of the national income as early as possible.

6. The Government of India recognizes that reconstruction of education is no easy task. Not only are the resources scarce but the problems are exceedingly complex. Considering the key role which education, science and research play in developing the material and human resources of the country, the Government of India will, in addition to undertaking programmes in the Central sector, assist the State Governments for the development of programmes of national importance where coordinated action on the part of the States and the Centre is called for.

7. The Government of India will also review, every five years, the progress made and recommend guidelines for future development.

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## **PART THREE**

### **IMPLEMENTATION**

This part of the Report deals with problems and programmes of implementation and covers two chapters-XVIII and XIX.

Chapter XVIII covers educational planning and administration. Among others, it deals with such problems as educational planning, the roles of private enterprise, local authorities and the Government of India, educational administration at the national and State levels, personnel of the Ministry of Education and the State Education Departments and procedures.

Chapter XIX examines issues relating to the financing of education. Among others, it deals with the growth of total educational expenditure in India during the post-Independence period and the resources likely to be available for educational development during the next twenty years. It also describes the allocation of available resources to different sectors of education as it was in the first three plans and as it is likely to be in the next two decades. It discusses the different sources of educational finance and broadly indicates the cost per student at each stage of education as it was during the last fifteen years and as it is likely to be during the next twenty years.

There are four important notes at the end of Chapter XIX.

Note I deals with grant-in-aid from State Governments to local authorities-urban and rural-and the Centre-State relationship in the financial support to education.

Note II deals with tentative estimates of expenditure on the development of school education (1966-85).

Note III deals with tentative estimates of expenditure on the development of higher education (1966-85).

Note IV gives a summary of the studies conducted by the Education Commission in the unit costs of higher education in a few universities and colleges.

## CHAPTER XVIII

### EDUCATIONAL PLANNING AND ADMINISTRATION

18.01 In the present chapter, we shall deal with educational planning and some major aspects of educational administration which have not been dealt with before and in particular with administrative responsibilities and arrangements at the local, State, and national levels and their interrelationships.

#### EDUCATIONAL PLANNING

**18.02 Basic Problem.** The crux of the problem of educational planning in India is to evolve a national policy in education in spite of the fact that education is largely a State subject in the Constitution and that a multiplicity of authorities at different levels make decisions on all aspects of the situation. This is not an easy task and as there is little similar experience to guide us, we will have to evolve our own techniques in most cases. It is also necessary to review and improve our planning techniques.

**18.03 Some Suggestions for Reform.** A review of the first three five-year plans in the different States and at the national level highlights the need to improve the planning techniques in some directions. These have been indicated below.

(1) *Over-emphasis on Enrolment and Expenditure.* There has been an over-emphasis on achievement of targets in enrolments and expenditure. It is true that expansion was badly needed and that it will have to continue. But an over-emphasis on this aspect leads to the neglect of the still more important aspect of quality. Similarly, an over-emphasis on expenditure targets tends to distort priorities and often leads to wastage. There is thus a need to take a more comprehensive view of the problem and to evolve a broader pattern of goals, especially those relating to qualitative improvement.

(2) *Need for Concentration of Effort and Adoption of a Selective Approach.* Throughout the first three plans, the general policy has been to do something in every sector or for every programme with the result that the meagre resources available were spread thinly over a very large area. This policy involves considerable wastage. It has, therefore, now become important to concentrate on a few crucial programmes such as improvement of the quality of teachers, development of agricultural education, provision of good and effective primary education for all children, liquidation of illiteracy, vocationalization of secondary education, establishment of major universities, expansion and improvement of postgraduate education, increase in the number of scholarships and development of about ten per cent of institutions at each stage to optimum levels of quality.

(3) *Emphasis on Programmes which Need Talent and Hard Work.* The emphasis on reaching expenditure targets to which a reference has been made tends to place a premium on programmes where it is easy to incur expenditure, e.g., construction of buildings or expansion of enrolments. This is unfortunate because there are a number of



programmes which call for determined effort, organization, talent and hard work rather than large financial investment. The following are some examples of such programmes:

- production of literature in the modern Indian languages needed for their adoption as media of education at the university stage;
- educational research;
- examination reform;
- preparation of school textbooks and teaching and learning materials ;
- in-service education of teachers and officers of the Education Departments;
- improving techniques of supervision;
- improving contact with the local communities and parents;
- providing enrichment programmes and guidance to gifted students and some special assistance to retarded or backward ones.

A number of instances of this type can be cited. What is important to note is that, in the existing situation where the financial resources are limited, it is programmes of this type that need for greater emphasis than those which involve heavy financial investment.

(4) *Lack of Adequate Evaluation and Research.* Yet another weakness in our planning is the inadequacy of evaluation and research. Since planning is a comparatively new process and we have to evolve our own techniques, it is necessary to evaluate our programme continuously and develop a strong research programme which will enable us to cut down costs and increase the effectiveness of the investment in education. But, by and large, this has not been done. Some attempts at evaluation have been made recently in the Planning Commission, viz., the COPP Teams have studied three problems<sup>213</sup> two which were not of major significance. What we would recommend is the deep involvement of universities, professional organizations, training colleges, etc., in a periodical evaluation of all major programmes included in the plans and in the development of a large-scale research programme on the lines recommended elsewhere.<sup>214</sup>

(5) *Weakness of Existing Machinery for Educational Planning.* The existing machinery for educational planning leaves much to be desired. It is not adequately staffed nor is the personnel engaged in it suitably trained. There is hardly any educational planning done at the district level. The planning cells in the offices of the Directors of Education are

<sup>213</sup>These are: teacher training, literacy among industrial workers and rural institutes.

<sup>214</sup>Chapter XII.

inadequate and staffed mostly by persons who have had no training in the field. Their work also is mostly administrative and financial and confined field. Their work also is mostly administrative and financial and confined to the compilation and reporting of educational and financial statistics.

18.04 There is need to improve the organization and methods of educational planning and for training competent personnel to staff the planning units in the Central Ministry of Education, the State Departments of Education and District School Boards, It should be possible for the Ministry of Education, in collaboration with the Asian Institute of Educational Planning, to undertake studies of educational planning in the different States and to conduct intensive courses for training the personnel involved in the process of educational planning in India. The subject is of such great significance that the UGC should also consider the possibility of setting up an Advanced Centre for Studies in Educational Planning Administration and Finance.

**18.05 Different Levels of Priorities.** Education is essentially a responsibility of the State Governments. But it is also a national concern and in certain major sectors, decisions have to be taken at the national level. This implies the need to regard education as Centre-State partnership. On the other hand, it is necessary to remember that education which concerns every parent and every family has to be taken as close to the people as possible and that its administration can be best conducted by or in close planning has to be decentralized to the district level and still further down to the level of each institution. The process of educational planning in federal democracy like ours has thus to be the right blend of centralization, in the appropriate sectors, with a large amount of decentralization in other sectors and especially in administration. Care should, however, be taken that the parts fall coherently into the totality of a broad national plan, and all discordant features and contradictions are eliminated. For this purpose, it will be necessary to devise an effective machinery of Coordination. The direction in which administration has to strive and planning has to grow.

18.06 One useful suggestion which can be made in this context is to adopt a system of priorities at different level-national, State and local. Programmes of national significance such as provision of good and effective primary education to every child, vocationalization of secondary education, postgraduate education and research, or education for agriculture and industry may be regarded as national priorities in the sense that the decisions regarding them would have to be taken by the Centre in consultation with the States and, once they are taken it should be obligatory on every State to implement them effectively and vigorously. In several other matters, and these would form the bulk of the decisions to be made, a system of State-level priorities should be adopted, i.e., each State may be left to make its own best decision in view of local conditions. These would include problems such as making secondary education free of tuition fees and, in such matters, no attempt at a national uniformity need be made. In certain other matters, as for instance, in the provision of amenities in schools, and determining the type and scale of non-teacher costs, a system of local priorities may be adopted. The State Governments may create appropriate authorities at the district and school levels and leave them free to take decisions, within the powers delegated, and best

suiting to the local conditions. There should be no need to expect any uniformity in these matters between one district and another and even between one school and another. A system such as this which centralizes a few essential sectors at the national level would be much better than the present trend to take more and more decisions- crucial or otherwise- at the national and State levels. This sometimes results in the curbing of local initiative and disregard of local conditions.

**18.07 Redefinition of the Roles of the different Agencies Providing Education.** It is necessary to redefine that role of the four different agencies which have been providing educational facilities in the country, viz., the Central Government, the State Governments, the local authorities and the voluntary organizations. Their present roles have arisen, not out of conscious planning but from historical circumstances many of which have now ceased to have any relevance. For instance, the divorce of the Central Government from education which was so conspicuous a feature of our educational system from 1921 to 1947 arose out of a political necessity, viz., the decision of the British Government to transfer education to Indian control (as a part of the system of Dyarchy introduced in the Provinces in 1921 and of Provincial Autonomy introduced in 1937) while retaining all authority at the Centre in the hands of the Governor-General. This tradition has been considerably modified by the Constitution and even more, by the developments in the first three plans, but it still dominates the scene. The local authorities were first placed in charge of primary education in British India as a part of a programme of transferring power to Indian people and, later on, they were permitted to develop other educational programmes in their discretion. In princely States, however, this political need did not exist and hence local authorities were not generally associated with education. The private educational institutions played an important role in all British Indian Provinces, especially in post-primary education, because direct governmental enterprise was limited and they had to meet almost all the growing demand for education. In the princely States, however, private enterprise was not much encouraged and sometimes it was even discouraged. It is obvious that these traditional roles are out of tune with the massive needs of educational development in the country and that they will have to be modified.

18.08 In the complex process of educational planning and implementation, the State Governments occupy a central and key position. They have to accept, for instance, full responsibility for all School education, but it is advantageous for them to discharge it in collaboration with local authorities. The day-to-day administration of schools, which should be as close to the local communities as possible, may preferably be delegated, with adequate resources, to duly constituted local authorities at the district level. In higher education, on the other hand, they will have to share the responsibilities with the universities, the UGC and the Government of India. In other words,

- school education is predominantly a local-State partnership; and
- higher education is a Centre-State partnership.

In our Opinion, it is this basic principle that should guide the evolution of that delicate balance between centralization and decentralization which our planning needs.

### ROLE OF PRIVATE ENTERPRISE

**18.09 Present Position.** We shall first discuss the role of private enterprise in education. This varies from area to area and also from one stage or sector of education to another. The statistics of 1960-61, the latest available and given in Table 18.1, throw light on this problem.

18.10 It will be seen from this table that the percentage of educational institutions managed by voluntary organizations is

TABLE 18.1. PERCENTAGE OF NON-GOVERNMENTAL EDUCATIONAL INSTITUTIONS TO TOTAL NUMBER OF EDUCATIONAL INSTITUTIONS (1960-61)

| State                | Percentage | Stage or Sector                                | Percentage |
|----------------------|------------|--|------------|
| 1. Andhra Pradesh    | 8.0        | 1. Pre-Primary                                 | 70.9       |
| 2. Assam             | 19.1       | 2. Lower Primary                               | 22.2       |
| 3. Bihar             | 74.0       | 3. Higher Primary                              | 27.1       |
| 4. Gujarat           | 36.0       | 4. Secondary                                   | 69.2       |
| 5. Jammu and Kashmir | 1.7        | 5. Vocational Schools                          | 57.4       |
| 6. Kerala            | 61.6       | 6. Special Schools                             | 69.0       |
| 7. Madhya Pradesh    | 4.6        | 7. Institutions for Higher (General Education) | 78.8       |
| 8. Madras            | 33.0       | 8. Colleges for Professional Education         | 49.8       |
| 9. Maharashtra       | 48.0       | 9. Colleges for Special Education              | 74.9       |
| 11. Orissa           | 65.3       |  |            |
| 12. Punjab           | 7.4        | Total for all Sectors                          | 33.2       |

|                   |      |
|-------------------|------|
| 13. Rajasthan     | 3.5  |
| 14. Uttar Pradesh | 14.5 |
| 15. West Bengal   | 36.3 |
| Total for India   | 33.2 |

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Source. Ministry of Education, Form A.

The local authority institutions are not included.

-low in Jammu and Kashmir (1.7), Rajasthan (3.5), Madhya Pradesh (4.6), Punjab (7.4), Andhra Pradesh (8.0) and Assam (19.1); high in Kerala (61.6), Orissa (65.3), and Bihar (74.0); low at the primary stage: lower primary (22.2) and higher primary (27.1);

- medium in vocational schools (57.4) and colleges for professional education (49.8); and

- high in pre-primary schools (70.9), secondary schools (69.2), special schools (79.0), institutions for higher (general) education (78.8), and colleges for special education (74.9).

With such large variations in traditions and in the present position, it is obvious that no single policy can be suitable for all parts of the country. In fact, even in the same State, the policy will have to vary from stage to stage, sector to sector and even from organization to organization. All that we can indicate, therefore, are a few general principles.

**18.11 Recommendations.** In our opinion, the future role of private enterprise in education should be broadly governed by the following principles:

(1) It is true that some forms of private enterprise have made a negative rather than a positive contribution to education. At the same time, we should recognize that private enterprise has played an important role in the development of education in modern India, that a large proportion of our good institutions are in the private sector and that it can continue to make a useful contribution. The State should, therefore, make all possible use of the assistance contribution to the development of education in the years ahead that can come from the private sector for the development of education.

(2) The growing educational needs of a modernizing society can only be met by the State and it would be a mistake to show any over-dependence on private enterprise which is basically uncertain. As the State has now rightly assumed full responsibility to provide all the needed educational facilities, private enterprise can only have a limited and minor role.

(3) Under the Constitution, private schools have a right to exist and if they do not seek aid or recognition from the State, there need be little or no interference with them. In fact, we have only suggested compulsory registration for unrecognized schools.<sup>215</sup>

(4) The position with regard to private educational institutions which seek financial support from the State is, however, different. Even now, they depend upon Government for the larger part of their expenditure; and when fees, which is their main source of income, are abolished, their dependence on public revenues would be very large. These should, therefore, be gradually assimilated with the system of public education on the lines described earlier.<sup>216</sup>

(5) In dealing with private enterprise, problems relating to their teachers, grant-in-aid and control are very important. These have already been discussed elsewhere.<sup>217</sup>

## ROLE OF LOCAL AUTHORITIES

**18.12 Present Position.** As pointed out earlier, there are two historical traditions with regard to the role of local authorities—one of associating local authorities with education which grew up in the British Indian Provinces and the other of not associating them with education which grew up in the Indian princely States. The arguments for and against such association have been repeatedly stated and need only be mentioned here in brief. It is generally agreed that local authorities do succeed in evoking local interest and local enthusiasm and effectively bring local knowledge to bear on the solution of problems. Their financial contribution to the support of education is not large. But it is not negligible either; and it is substantial in the case of richer municipalities like Bombay City. Their main weaknesses, however, are the harassment caused to teachers, through frequent transfers and postings, and through involvement in local factions and politics. This is the one reason why almost all teachers' associations have represented to us that the local authorities should not be placed in charge of educational institutions. This evil increases as the delegation of authority goes to lower levels, e.g., it is definitely greater when the authority is delegated to the block level than to the district level.

18.13 In the post-Independence period, two attempts have been made to redefine the role of local authorities in education and to evolve a uniform national policy. Unfortunately, these have not succeeded, partly because the two Committees which examined the problem made somewhat conflicting recommendations. The Committee set up under the chairmanship of Shri B. G. Kher rejected the British Indian view that the creation of local authorities and their association with primary education was necessary as a training ground for democratic self-government. It was emphatically of the opinion that education should not be made a guinea-pig on the altar of democracy or decentralization and recommended that the interests of mass education should be the only criteria to decide

<sup>215</sup>Chapter X. <sup>216</sup>Chapter X.

<sup>217</sup>Chapters III, IV, X and XIII.

whether authority over primary education should be delegated to the local bodies, and if so, to what extent. Although aware of the frequent maladministration of education by local bodies and particularly of the harassment which was often caused to teachers, it felt that these weaknesses could be overcome through appropriate measures and recommended that local bodies should be associated with the administration of primary education, with adequate safeguards to protect the interests of teachers, because such associations would further the cause of mass education and bring the goal of universal education near'.<sup>218</sup>

18.14 Before the recommendations of the Kher Committee could be implemented or even adopted, a different set of recommendations on the subject was made by another Committee, the COPP Team on Community Development, which was set up under the chairmanship of the late Shri Balwantrai Mehta to review the community development programme and its future organization. It was of the view that local interest and local initiative in the field of development would not be adequately involved unless 'a single representative and vigorous democratic institution' was created at the appropriate level 'to take charge of all aspects of development work in the rural areas' and invested with adequate powers and appropriate finances. Such a body, said the Committee, 'must not be cramped by too much control by Government or Government agencies. It must have the power to make mistakes and to learn by making mistakes, but it must also receive guidance which will help it to avoid making mistakes'. In accordance with this basic approach, the Committee recommended that strong local bodies should be created in rural areas and vested with adequate authority to administer all developmental programmes, including primary education.

18.15 The problem of integrating these two different traditions and the divergent recommendations of these two Committees became urgent when the State reorganization brought together areas from the erstwhile British Indian Provinces and the princely States. But so far it has not been possible to solve it and to evolve a uniform national policy (or, in some cases, even a uniform State policy). The present position shows a mixture of both the traditions, not infrequently, even in the same State. In urban areas, the municipalities have been associated with education in Andhra Pradesh (Andhra area), Bihar, Gujarat (Bombay area), Madhya Pradesh (Maha Koshal area), Madras (Madras area), Maharashtra (Bombay and Vidarbha areas), Mysore<sup>219</sup> (Bombay and Madras areas) and Orissa (old Orissa province area). In rural areas, the panchayati raj institutions have been introduced and placed in charge of education in all States except Jammu and Kashmir, Kerala, Madhya Pradesh, Mysore, Nagaland and Punjab. The method of association is also not uniform. The municipalities are generally in charge of primary education; but they can also undertake other educational activities at their discretion. The panchayati raj institutions have been entrusted with lower primary education in some States (e.g., West Bengal); with the whole of primary education in some others (e.g.,

<sup>218</sup>Report of the Committee on the Relationship between State Governments and Local Bodies in the Administration of Primary Education, 1951.

<sup>219</sup>The Mysore Government has recently decided to relieve the municipalities of this responsibility.

Madras); and with both primary and secondary education in two States (Andhra Pradesh and Maharashtra). Authority over education has been delegated to the block level in some States (e.g., Rajasthan and Madras); and to the district level in some others (Maharashtra). The systems of administration and grant-in-aid also show similar variations.

18.16 In our opinion, the policy in these matters will have to be decided on a pragmatic basis with reference to ultimate goals and local conditions. The close involvement of schools with their communities is a principle of great educational significance; and this is the direction in which we should move. At the same time, the difficulties caused to teachers under local authority management cannot be ignored and at least in the transitional stage, adequate safeguards would have to be provided to teachers. Local authorities should realize their responsibilities and ensure that they help rather than hinder the cause of education. Here we are more inclined to agree with the Kher Committee that the decision to associate local authorities with the administration of education should be taken not on political but on educational grounds and that the only justification for such a decision should be a conviction that it would promote the cause of education and bring the goal of providing universal education nearer. Similarly, local authorities should not be encouraged to think that they can claim to administer education as a matter of right and that this right will continue with them in spite of bad administration or harassment of teachers. The normal practice should be that a local authority is given the right to administer education as a privilege subject to two conditions-promoting the cause of education and good administration-and that this privilege would be withdrawn if either of these conditions is violated. There is no need to insist, as is often done at present, that a uniform policy must be adopted in all parts of the country simultaneously. It would be in the larger interests of education to adjust the experiment to local conditions and to permit each area to progress at a pace and in a manner best suited for its growth.

**18.17 Recommendations.** In view of these broad principles, we recommend that the future role of local bodies in education may be defined as follows:

(1) As an ultimate objective it is essential that schools and their local communities should be intimately associated in the educational process. This will harness local knowledge, interest and enthusiasm for the development of education. Besides, local bodies can make a significant contribution to the total expenditure on education.

(2) It would, however, not be proper to look upon this democratic decentralization as an end in itself and to press for its universal and immediate adoption without reference to local conditions.

(3) The immediate goal in this respect-and this should be adopted immediately as a national policy in all the States-is to associate the local communities, namely village panchayats in rural areas and the municipalities in urban areas, with their local schools and to make them responsible for the provision of all non-teacher costs with the help,



where necessary, of a suitable grant-in-aid from the States. The detailed proposals on this subject are discussed elsewhere<sup>220</sup>

(4) The ultimate goal to be reached is the establishment, at the district level, of a competent local education authority which may be designated as the District School Board (to be constituted under an Education Act which we are recommending) and which would be in charge of all education in the district below the university level. This should also be accepted as a national policy. The jurisdiction of this authority should cover the entire area of the district with one exception, namely, the big municipalities in the district with a population of 1,00,000 or more which should preferably have a similar authority for their own areas. The detailed proposals on this subject are discussed below.

(5) The transition from the immediate to the ultimate objective cannot be made in one jump but will have to proceed through a number of carefully planned stages. It cannot also be made simultaneously in all States and perhaps not even simultaneously in all the districts of a State. The difficult decisions regarding the type of local authority to be created, the level at which powers are to be delegated, the extent and nature of delegation, the powers to be retained by the State Government, the system of grant-in-aid, etc., are so complex that each State will have to decide them for itself, not even necessarily for the State as a whole, but perhaps separately for each district. While, therefore, the Centre may advise the States to move towards the ultimate objective as soon as practicable, it would be wrong to pressurize all States to adopt common policies in the matter. There is no inherent virtue in such a uniformity; and it may lead to better administration to recognize that, while the immediate and ultimate objectives may be assumed as national goals, there need be no uniformity with regard to the details of the transition from the immediate to the ultimate objective. These should be left for decision at the State level in view of local conditions.

(6) In all such association of the local authorities with education adequate safeguards should be provided to ensure that the teachers are not harassed and that they do not get involved in local factions and politics. Experience has shown that, for this purpose, it is necessary to vest the control over the teachers, not in the local authority, but in its Administrative Officer (who should be an officer of the Education Department seconded to serve under the local authority), to associate him closely with the District Education Officer in the discharge of this responsibility and to frame a fairly detailed system of rules and regulations to smoothen and guide the day-to-day administration.

(7) It is necessary to remember that it is not enough to decentralize the administration of education and to vest it in the local authority. The programme will not succeed unless intensive steps are taken to educate local leadership on the right lines, to provide the local

<sup>220</sup> Vol.II, Chapter X.

authority with trained and competent officers who would have certain independence in the performance of their duties and to make the necessary resources available to the local authority to fulfil the responsibilities placed upon it. This will be a major task for the State Education Departments.

**18.18 District and Municipal School Boards.** The need for the establishment of local educational authorities at the district level has been pointed out already.<sup>221</sup> We shall now discuss some details about their composition, powers and responsibilities and finances. The jurisdiction of the district school board should cover the entire area of the district with one exception, namely, the big municipalities in the district with a population of about 1,00,000 or more which should preferably have similar boards for their own areas. A district school board should consist of-

- (1) Representatives of the Zila Parishad elected by itself;
- (2) Representatives of the municipalities in the district (which do not have a separate school board of their own) elected in the prescribed manner;
- (3) Educationists nominated by the State Government or elected by the Zila Parishad from out of the panel approved by the State Governments; and
- (4) Ex-officio members, such as officers of education, agriculture, industries or other departments which administer vocational schools.

Persons in categories (3) and (4) should be about half of the total membership. A senior officer of the State Government (Class 1) should be the whole-time secretary of this board, which should be provided with the necessary administrative and supervisory staff.<sup>222</sup>

18.19 The functions of this board would cover all school education in the district-general as well as vocational; it will directly administer all government and local authority schools within the district, and it will also remain in charge of giving grants-in-aid to all private institutions in the district in accordance with the rules framed by the State Government for the purpose.

18.20 Within the framework of the instructions given by the State Government, it should be a responsibility of the district school board to prepare plans for the development of school education within the district and it should also be the principal agency within the district to develop school education, the finances and guidance required for the purpose being provided by the State Government and the State Education Departments.

<sup>221</sup>Chapters VI and X.

<sup>222</sup>Where Zila Parishads do not exist, the composition of the District School Boards will have to be decided differently to suit local conditions. It may consist of persons nominated by the State Governments and others representing local interests.

18.21 In big towns with a population of 1,00,000 or more, it would be desirable to establish municipal school boards on the above lines since these would be viable administrative units. It would also give an opportunity to the local people, who are better educated, more well-to-do and vocal, to take positive interest in developing an educational programme for their children. The composition, powers and responsibilities of these boards should be similar to those of the district school boards.

18.22 Each school board will maintain an education fund. The Zila Parishads (or municipalities) will approve the budget of the school boards. They will also raise the resources expected of them and credit them to the school board. In all day-to-day administration, the school board would be autonomous. The same relation would hold good between a municipal school board and its municipality.

18.23 The recruitment of teachers will be done by a special committee consisting of the chairman of the board, its secretary and the district education officer. The transfers should be effected by the same committee, subject to rules framed by the State Government, the general policy being to reduce transfers to the minimum and to allow teachers to develop loyalties to individual institutions. The salaries, allowances, and service conditions of teachers will be regulated by the State Governments and will be common to all the districts. These measures will provide safeguards to teachers; and the fact that all school teachers are serving together under the boards (and not primary teachers alone as at present) will be a further strength and an additional safeguard.

18.24 It may be advantageous, in some cases, not to burden the school boards with full administrative responsibilities all at once. In such cases, the entire administration of the schools may be left with the officers of the Department (especially the personnel administration) and the school board may be given powers with regard to planning and development. Additional powers may be conferred on it as it gains experience and competence.

## **ROLE OF THE CENTRAL GOVERNMENT**

**18.25 Present Position.** Under the Constitution, the Central Government has been specifically vested with several educational responsibilities, and certain other responsibilities also devolve upon it as the Government of the Union. The more important of these are enumerated in the following entries of the Seventh Schedule.

### **List I-Union List**

63. The institutions known at the commencement of this Constitution as the Banaras Hindu University, the Aligarh Muslim University and the Delhi University and any other institution declared by Parliament by law to be an institution of national importance. 64. Institutions for scientific or technical education financed by the Government of India wholly or in part and declared by Parliament by law to be institutions of national importance.

65. Union agencies and institutions for:

(1) professional, vocational or technical training, including the training of police officers;  
or

(2) the promotion of special studies or research; or

(3) scientific or technical assistance in the investigation or detection of crime.

66. Coordination and determination of standards, in institutions for higher education or research and scientific and technical institutions.

### **List III-Concurrent List**

25. Vocational and technical training of labour.

In addition, the Government of India is also responsible for several other educational programmes which include: national planning; educational and cultural relations with other countries; participation in the work of the UN and its specialized agencies, especially UNESCO; clearing-house function of collecting and disseminating ideas and information; education in the Union Territories; propagation, development and enrichment of Hindi; preservation and promotion of national culture, including patronage to national art; special responsibilities for the cultural interests of minorities; responsibilities for the weaker sections of the people such as the Scheduled Castes and Scheduled Tribes; responsibility for promoting national integration through suitable programmes; and grant of scholarships, particularly at the university stage.

**18.26 Recommendations.** We are of the view that education must increasingly become a national concern and we have indicated, in the relevant context, the role that the Government of India should play in the development of education. For instance, apart from its role in the improvement of educational administration which we are discussing in this chapter, we have indicated several other Central responsibilities in education for

- the improvement of teacher status and teacher education;<sup>223</sup>

- manpower planning in crucial sectors like agriculture, engineering, medicine, etc.;<sup>224</sup>

- the development of a programme of scholarships;<sup>225</sup>

- the equalization of educational opportunities with special reference to the reduction of inter-State differences and the advancement of the weaker sections of the community;<sup>226</sup>

<sup>223</sup>Chapters III and IV. <sup>224</sup>Chapter V. <sup>225</sup>Chapter VI.. <sup>226</sup>Ibid.

- the provision of free and compulsory education as directed by the Constitution;<sup>227</sup>
- the vocationalization of secondary education;<sup>228</sup>
- the improvement of standards at the education;<sup>229</sup>
- the development of higher education and research with special reference to the postgraduate stage;<sup>230</sup>
- the development of professional education in agriculture and industry;<sup>231</sup>
- the promotion of scientific research;<sup>232</sup> and
- the encouragement of educational research.<sup>233</sup>

18.27 We are convinced that the radical reconstruction of education which we have recommended in this Report will not be possible unless (1) the Government of India provides the needed initiative, leadership and financial support and (2) educational administration, both at the Central and State levels, is adequately strengthened.

(1) With regard to the first, we recommend that the Centre should play an important role in the development of educational research. It should make the good work done in one area of the country known to the other areas, through coordinating and clearing-house functions which cross-fertilize educational thinking, through periodical reviews and through conducting, or offering assistance to conduct or pilot experimental projects. There is also the need to establish, in special cases, Central institutions which can set the pace for others. It is but proper that, as in the past, the Central institutions thus established should largely be in the scientific and technical sector. But it is also necessary for the Centre to establish institutions specializing in social sciences, including pedagogical sciences and the humanities. These should be established in close association with the universities and be an integral part of the university system. Besides, the Centre can also develop education in the Union Territories, particularly in Delhi, to serve as a pace-setter for the other areas.

(2) As regards the general strengthening of the administration, the constitution of the Indian Educational Service, with the amendments proposed by us, is a step of considerable importance. It is also a Central responsibility to arrange for the in-service training of educational administrators through such programmes as the conduct of an administrative staff college for senior officers of State Educational Services. This will be discussed in some detail a little later. The Centre should scout for talent in different fields and make the services of the best people in the country available to the State Governments for advice and assistance in all matters. It also has a significant role in the preparation of teachers to which we have already made a reference.

<sup>227</sup>Chapter VII. <sup>228</sup>Ibid. <sup>229</sup>Chapter X. <sup>230</sup>Chapter XII. <sup>231</sup>Chapters XIV and XV. <sup>232</sup>Chapter XVI. <sup>233</sup>Chapter XII.

18.28 Equally important is the role of the Central Government in providing financial assistance for the development of education. This assistance will take three forms:

- 1) Grants-in-aid (including transfer of revenues) made to the State Governments on account of their committed expenditure, through the quinquennial Finance Commissions;
- (2) Grants-in-aid for development expenditure given for the plan as a whole, through the Planning Commission; and
- (3) Expansion of the Central and the Centrally sponsored sectors.

With regard to the first, our colleague, Prof. M. V. Mathur, is of the view that it would be a great improvement if the Finance Commission could be a Standing Commission, mostly with part-time membership and a small, compact secretariat. Certain minimum percentages of the proceeds of income-tax and Central excise revenues could be guaranteed to the States and distributed on population basis. For the rest of the flow of funds from the Centre to the States, the Finance Commission should hold annual reviews (this could be done immediately after the annual plan discussions with the States) and make necessary adjustments in transfer of revenues and grants-in-aid on the basis of needs and performance. With regard to the second, we are not generally in favour of earmarking funds for specific sub- schemes in the educational sector within the State plans. The total allocation for education should not be altered without the approval of the Planning Commission. But within it, the State Governments should be free to use the funds at their discretion.

We attach considerable importance to the third, namely, the expansion of the Central and the Centrally-sponsored sectors. It is through this mechanism that the Centre will be able to stimulate and guide educational developments in the national interests in the crucial sectors referred to above.

**18.29 Should Education be in the Concurrent List?** An important issue raised in regard to the role of the Central Government is the desirability or otherwise of including education in the concurrent list in the Seventh Schedule of the Constitution so that the Centre may be able to control educational developments through legislation. The Committee of the Members of Parliament on Higher Education (presided over by Shri P. N. Saprú) which examined the whole issue recommended that higher education at least should be included in the concurrent list. In the same vein, we have received various proposals to include some other sectors of education, e.g., technical education, in the concurrent list. Our colleagues, Shri P. N. Kirpal and Dr. V. S. Jha, are of the view that the whole of education should be included in the concurrent list. In their opinion, the experience of the years since Independence has shown that, for the lack of adequate authority at the Centre, national policies could not be implemented satisfactorily and that the excellent recommendations of many commissions and committees, in various fields of education, remained on paper. Even the resolutions unanimously adopted by the conferences of Education Ministers and the Central Advisory Board of Education remained unimplemented. They think that although there is some scope for more

effective implementation within the present constitutional set-up by evolving suitable conventions and especially by developing new attitudes to the national character of education, these changes will not be easy to be brought about and they will not be sufficient. They, therefore, think that the Union Government should be invested with legal authority in the field of education, which should appear in the concurrent list of subjects. The constitutional amendment will of course, take some time to take effect but the process towards this should be started as early as possible.

18.30 We have examined this problem very carefully. We are not in favour of fragmenting education and putting one part in the concurrent and the other in the State list; education should, under any circumstances, be treated as a whole. We also do not agree with our colleagues and are of the view that in a vast country like ours, the position given to education in the Constitution is probably the best because it provides for a Central leadership of a stimulating but non-coercive character. The inclusion of education in the concurrent list may lead to undesirable centralization and greater rigidity in a situation where the greatest need is for elasticity and freedom to experiment. We are convinced that there is plenty of scope, within the present constitutional arrangement to evolve a workable Centre-State partnership in education and that this has not yet been exploited to the full. The case for amending the Constitution can be made only after this scope is fully utilized and found to be inadequate. All things considered, we recommend that an intensive effort be made to exploit fully the existing provisions of the Constitution for the development of education and evolution of a national educational policy. The problem may then be reviewed again after, say, ten years.

### **EDUCATIONAL ADMINISTRATION: NATIONAL LEVEL**

18.31 The agencies at the national level concerned with the development of education are the Ministry of Education, the University Grants Commission and the National Council of Educational Research and Training (or the NCERT). We have already discussed the role of the UGC.<sup>234</sup> We have also suggested the establishment of a National Board of School Education.<sup>235</sup> We shall now turn to our proposals for the Ministry of Education and the NCERT.

**18.32 Ministry of Education.** The present convention is that the post of the Secretary to the Government of India is not to be filled from the ICS or IAS pool and that it should be given to an eminent educationist who should be designated as 'Educational Adviser to the Government of India and Secretary to the Ministry of Education'. This is a healthy tradition and should continue. It is also necessary to make it clear that this is a 'selection post' and that it should not go, as a matter of routine, by promotion to the present advisory service or even to the proposed IES. This should be a tenure post, given only for six years in the first instance with an extension, in exceptional cases, for three or four years, but not renewable further. The selection should be made from amongst all persons available, official, nonofficial, IES, University men, etc. So much depends upon the

<sup>234</sup>Chapter XIII. <sup>235</sup>Chapter X

selection of the right man for this post that no vested interest of any service should be allowed to stand in the way and, through a proper machinery for selection, the best man available in the country should be recruited on a tenure basis. We would like to mention that the present status of the Ministry of Education in the academic world is largely due to the fact that its Secretaries were selected in the post-Independence period from outside the services and from among eminent educationists.

18.33 It is extremely important that eminent educationists, outstanding teachers in universities and schools and leading officials from the State Education Departments should be associated with the Ministry of Education so that it can provide the needed leadership and command the confidence of the public and the teaching community. We, therefore, recommend that all the posts at the level of additional or joint secretaries and joint educational advisers should be divided into two categories:

(1) About half the posts should be filled from among the official ranks by promotion, i.e., from the present education advisory service (or the IES when it is constituted) and officers seconded from the State Education Departments.

(2) The remaining half should be filled from the ranks of eminent educationists and outstanding teachers in universities and schools. The term of each tenure should be five years to be renewable at the most for a second term.

The top-level machinery for advising the Union Minister of Education and executing his orders will consist of the Educational Adviser and Secretary to the Government of India and all the additional and joint secretaries and joint educational advisers. 18.34 Our proposals to strengthen evaluation and research by the establishment of a Research Council in the Ministry of Education has already been discussed in Chapter XII and earlier in this chapter. Two other functions of the Ministry of Education also need considerable strengthening and expansion.

(1) The first is the clearing-house function. The Ministry of Education has to function as a national clearing-house in education. This is necessary, not only in its own right, but also as an important aid to planning. What is needed is the collection of information on important educational topics from the State Governments, according to a well-planned schedule and its publication, with proper analysis, for the information of all concerned. These data should also be re-collected periodically so that each publication serves as a benchmark. We recommend that a well-staffed division should be created to perform this function on an adequate scale. It was not possible for us to go into the details of the various types of studies required. Some of these have been indicated in our Report in the appropriate context. We suggest that the Ministry of Education may set up a committee to examine the issue and to prepare a programme for action.

(2) The second is the maintenance of a good statistical service which is another major responsibility of the Ministry of Education, from the point of view of educational planning, policy-making and evaluation. This service should have three main functions: (a) to collect, publish and interpret educational data; (b) to conduct statistical studies,



investigations and surveys; and (c) to make projections and forecasts for the future. The existing statistical service leaves a good deal to be desired. At present, only the first function is being performed. There is so much delay in the collection, collation and publication of the data that it is almost out-of-date for the purpose of planning by the time it is published. Moreover, no worthwhile interpretation of the past data is done and the other two functions have been completely ignored. In order that these functions may be discharged properly, it is essential that the statistical section of the Ministry should be reorganized and strengthened. From this point of view, we make the following recommendations:

(a) A master plan should be prepared for the publication of educational data and for the surveys and investigations which should be conducted from time to time.

(b) The combination of the publication of routine statistics with studies of special problems is not desirable. The publication of routine annual statistics should therefore be the responsibility of a special unit as at present. But it will be desirable to create a new unit for the conduct of special surveys and investigations.

(c) To make this service more efficient, it will be desirable to introduce mechanization to the extent feasible.

(d) The statistical unit should continue its present function of providing training to the statistical staff of the State Governments and universities. However, there is need to tone up the quality and content of this training. The Ministry should also provide opportunities to its own statistical staff to receive training and periodic reorientation at training courses conducted by other expert bodies like the Indian Statistical Institute and the Central Statistical Organization.

(e) The statistical units of the State Departments of Education will have to be reorganized and strengthened likewise to enable them to perform practically the same functions as outlined above for the statistical unit of the Education Ministry.

18.35 Of the various advisory bodies of the Ministry of Education the most important is the Central Advisory Board of Education which has been functioning since 1935. The Minister for Education, Government of India, is the chairman of this Board and all the State Ministers of Education are members. The Government of India also nominates a few experts and representatives of different interests on the Board. It has also the representatives of the Planning Commission, the University Grants Commission and the Inter-University Board of India. We recommend that this organization with all its standing committees be functionally strengthened.

**18.36 NCERT.** The establishment of the National Council of Educational Research and Training has been a step in the right direction. We give below some indications of the lines on which its future development should take place.

(1) *Functions.* The principal function of the NCERT is extension work with the State Education Departments centering round the improvement of school education. It is uniquely suited for this function because the Union Minister for Education is its President and all State Education Ministers are its members. The objective of policy should, therefore, be to develop the NCERT as the principal technical agency functioning at the national level for the improvement of school education and operating through and in collaboration with the National Boards of School Education, State Departments of Education and their technical agencies like the State Institutes of Education.

(2) *Constitution.* The Governing Body of the NCERT should have an all-India character, with a majority of non-officials. In particular, it is desirable to have at least one outstanding teacher from secondary schools and a person specializing in primary education, preferably a primary teacher.

(3) *Director and joint Director.* We recommend that the Council should have its own full-time Director and joint Director. At present the Secretary to the Ministry of Education is the Director of the Council and an officer of the Ministry (generally part-time) is the joint Director. This is not an ideal arrangement, and the size and importance of the Council are such that it would be wrong to leave its leadership in the hands of part-time officers whose loyalties and commitments lie elsewhere. The Council should have a whole-time Director of its own who should be an eminent educationist in the field. His status should be that of a vice-chancellor. His term of office should be five years, renewable for not more than one term. The joint Director (who may be an officer lent by the Ministry) would be needed mainly for the purposes of assisting the Director and relieving him of routine administrative matters.

(4) *Regional Colleges and CIE.* The NCERT is now running four regional colleges for training of secondary school teachers. Our views on this programme have been fully discussed elsewhere.<sup>236</sup> The Council is also in charge of the Central Institute of Education, Delhi. We suggest that this institution should be transferred to the Delhi University; and we hope that the Delhi University will establish a School of Education on the lines of our recommendations and give a lead to the improvement of the programme of teacher education in the country.

(5) *Personnel.* The success of the NCERT will depend upon the extent to which it is accepted by the State Education Departments and their technical wings and upon the extent to which it is able to assist them to solve their technical problems in the field. It would, therefore, be desirable that there is a considerable interchange and flow of officers from the NCERT to the State Departments and vice versa. This could be secured by inviting selected officers from the State Education Departments to work in the NCERT on tenure appointments. Arrangements should also be made with the State Governments under which officers of the NCERT could work in State Education Departments for specified periods.

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(6) As the NCERT has to play the keyrole in promoting qualitative improvements in school education, it is imperative that its campus should be developed speedily and the building programme given the highest priority. The present dispersal of departments and units in distant parts of the city is not conducive to efficient functioning.

### **EDUCATIONAL ADMINISTRATION : STATE LEVEL**

18.37 The State Education Departments are the principal agency-to prepare and implement educational plans. Unfortunately no adequate attention has been paid so far to their development on proper lines. Their structure, designed during the British period for very limited purposes, continues to be substantially unchanged even to this date. Their procedures and programmes are still largely traditional and the outlook of their officers is, more often than not, rigid and conservative. It is true that there has been some expansion in the Education Departments. But most of this expansion has been on traditional lines and has not implied any qualitative change in their functioning. Moreover, even this numerical expansion has not kept pace with the demands of the situation and has fallen far short of the expansion in the number of educational institutions, their enrolments, or total educational expenditure. In some States, programmes of retrenchment in the strength of the Education Departments have been carried out even when expansion of educational facilities was in full swing. The State Education Departments, as constituted at present, will not be in a position to assume responsibility for the complex and difficult programme of educational reconstruction outlined in this Report. It is, therefore, necessary to accord priority to programmes for the improvement of educational administration at the State level. Our major recommendations in this regard are given below.

**18.38 Coordination.** Coordination is very often an administrative bottleneck at the State level because educational programmes are spread over a number of departments at present. In most States, general education is in one department and under one Director of Education or Public Instruction. In some States, however, even general education is divided into two parts, college education and school education, and placed under different Directors. Sometimes there are additional directorates for Sanskrit or art education. In three States the education of tribals is separated and placed under a different department. In all States, technical education is under a separate directorate and may or may not form a part of the Education Department. Agricultural education is generally under the Department of Agriculture and medical education under the Medical and Health Services Departments. The industrial training institutes are mostly under the Department of Industries. Programmes of adult education are sometimes grouped with general education and, on other occasions, placed under the Community Development Administration. It is obviously necessary that these different programmes of educational development should be coordinated properly and viewed as parts of a comprehensive whole.

18.39 To place all these different aspects of education under the 'umbrella' of a single department does not seem to be administratively feasible, and, for some time to come, we shall have to accept the factual position that education will be administered by more than one department. It is, therefore, desirable to create, at the State level, some machinery to

coordinate the programmes of all these different sectors of education and to take a unified view for purposes of planning and development. The following two measures may be considered from this point of view:

(1) A statutory Council of Education should be created at the State level. As separate arrangements have already been suggested for the development of higher education which is a Centre-State University partnership, the scope of this Council should be restricted to school education or all education below the university level. It should have the State Minister for Education as the chairman and its membership should include representatives of universities in the State, all directors in charge of different sectors of education and some eminent educationists. It should meet about three or four times a year and have a small secretariat of its own. Its principal functions should be to advise the State Government on all matters relating to school education, either suo motto or on points referred to it, to review educational developments in the State and to conduct evaluation of programmes from time to time through suitable agencies. This should be the most important advisory body at the State level and, if necessary, it may form standing or sub-committees for different sectors and programmes. Its annual report, along with its recommendations, should be presented to the State legislature.

(2) It may be desirable to have, in addition, a standing committee at the officers level. It would include all State level officers in charge of different sectors of education and meet periodically under the chairmanship of the Education Secretary.

**18.40 The Education Secretariat.** At present the Education Secretary is generally an IAS officer, except in West Bengal, where he belongs to the Education Service. We are of the opinion that the Education Secretary also, like the Educational Adviser to the Government of India, should be an educationist rather than an administrative officer. It will, therefore, be desirable to make this appointment a tenure post.

18.41 The relationship between the Education Secretary and the Director of Education has been a subject of long controversy since the issue was first highlighted by the Hartog Committee in 1928. The most common complaint is that the Education Secretariat completely dominates over the Directorate of Education and interferes even in purely technical matters. It has also been argued that the dual scrutiny of proposals that now takes place in the Directorate as well as in the Education Secretariat leads to considerable delays. The remedy most frequently suggested is that the Director of Education should be ex-officio Secretary or Additional Secretary to the Government. The problem is difficult and there is no easy answer to all the complex relationship. Broadly speaking, the role of the Education Secretariat should be to examine educational problems from the administrative and financial points of view and in the wider context of government policies for development. It should give due weightage to the views of the Directorate in technical matters and assist the Director to function as the effective head of his department. The key to a successful relationship lies, however, in the 'personal equation' between the Director of Education and the Education Secretary; and where this has been of the right type, the results have been satisfactory.

**18.42 Directorate of Education.** At present the Directorates have grown big and there is not enough delegation of powers to the district level. The time of the Director of Education therefore is so taken up with personnel administration and trivial details that he has no time for his principal responsibility of providing leadership in educational development. We have, therefore, made two important proposals which will alter the entire functioning of the department:

(1) the constitution of district school boards at the district level and the transfer to them of the administration of all education below the university level (including the management of all government schools); and

(2) the strengthening of the office of the district inspector of schools so that he takes over almost all the responsibilities of the Directorate in his area.<sup>237</sup>

When these changes are carried out, the directorate will be a compact and efficient organization concerned mainly with general coordination and supervision over the district education officers and district school boards. It will then be possible for them to vitalize education through a purposeful and dynamic leadership.

## PERSONNEL

18.43 Administration is essentially a matter of faith and vision, bold and courageous leadership, and proper handling of human relations. The importance of securing the right type of personnel for it cannot, therefore, be over-emphasized. The major weaknesses of the existing organization of the State Education Departments are largely related to personnel. These include: shortage of personnel at the higher level; lack of specialized staff; unsatisfactory remuneration and conditions of service; unsatisfactory methods of recruitment; inadequate provision of in-service education; and inadequate staffing.

**18.44 The Indian Educational Service.** The creation of the Indian Educational Service or IES is a step in the right direction and if organized on proper lines, such a service would help the progress of education. We are, however, not happy at some of the features of the proposal which is now under consideration of the Government. We shall, therefore, examine this issue in some detail.

18.45 At the very outset, it should be noted that the character of the IES will have to be very different from the IAS or other Central Services. First, in education, administration is a service agency to teaching and research and not their master. Secondly, one cannot be a good educational administrator unless one is also a good teacher. Thirdly, there should always be a possibility for an educational administrator to come back to teaching or research and for a teacher to go over to the administrative side on a tenure assignment. In our opinion, the present proposal for the organization of the IES cuts across these sound principles of educational administration. As proposed at present, two-thirds of the

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recruitment to the IES will have to be made directly by open competition. The persons selected will not generally have any experience of teaching or research and would have had no opportunity to show their competence in these fields. The remaining one-third of the posts will be filled by promotion from State services and some of these may be teachers in government schools and colleges. But the bulk of the teachers, i.e. university teachers and teachers in private schools and colleges will be barred entry within its ranks. This can only have a depressing effect upon the body of the teaching profession and ultimately on education itself. We, therefore, strongly feel that the method of recruitment to the IES should be as follows:

(1) Only one-third of the posts should be filled by direct recruitment at the level of the junior scale. Even these selected persons should not be placed in administration direct. Their first assignments, for a minimum period of two or three years, should be in teaching; and it is only after this initiation that they should be assigned to administration.

(2) The remaining two-thirds of the posts should be filled, partly by direct recruitment and partly by promotion at the level of the senior and higher scales. One-half of these posts (i.e. one-third of the total) would be filled by promotion from the State services. The remaining half should again be filled by direct recruitment-some at the level of the senior scale and others at the level of the higher scales. The age- limits for these recruitments should be suitably fixed, say, 35 and 45 years, and the applicants should have put in a minimum of service as teachers or should have distinguished themselves as research workers.

(3) Some posts in the IES should be available for being filled by tenure appointments of teachers for specified periods. In the same way, some posts in teaching and research should also be available for tenure appointments of persons from the IES.

18.46 The second point which we examined in detail was that of creating a teaching wing in the IES. The present proposal visualizes the encadrement of the posts of the principals of government colleges (which are regarded more as administrative than as teaching posts). There is also a suggestion that some posts of the principals of higher secondary schools should be encadred. There is no objection to a few posts of principals of government colleges or of higher secondary schools being encadred. In fact, it would be good to do so. But this does not require the creation of a teaching wing-the posts of these principals can be made interchangeable, as they are even at present, with some levels of inspecting officers. But there are insuperable difficulties in the creation of a teaching wing as such which, if it is to be created at all, should include a large proportion of the teaching posts in higher education. This will not be possible because all the teaching posts in the universities and the vast bulk of the posts in the government colleges (to say nothing of the posts in private affiliated colleges) will have to be kept out of the IES. The attempt to create a teaching wing by the encadrement of a few posts of the principals of government colleges is, therefore, likely to do more harm than good by adversely affecting the morale of the teaching community as a whole. We, therefore, recommend that the idea of creating a teaching wing in the IES should be abandoned and the service should encadre only the following posts:

- all posts of Directors, Additional Directors, joint Directors, Deputy Directors, etc., District Educational Officers (and equivalent posts) in the State Education Departments (inclusive of the principals of government colleges and a few posts of headmasters of higher secondary schools);
- all gazetted advisory posts in the Ministry of Education;
- suitable posts in the NCERT;
- all gazetted posts dealing with educational programmes in other Ministries of the Government of India;
- suitable gazetted posts in the Education Departments of the Union Territories; and
- suitable posts of principals of higher secondary schools under the scheme of Central Schools.

18.47 Instead of creating a teaching wing in the IES, we recommend that an adequate number of posts comparable to the higher scales of pay in the IES should be created in the universities and colleges. This is justified on educational grounds because the remuneration and status given to teachers and research workers should be at least equal, if not better, than those given to educational administrators. It will also prevent a drain of talent from teaching and research to administration.

18.48 Some thought will have to be given to languages required from the members of the IES. It is true that officers of the IES will need a much better command over the regional language than those in the IAS. But the advantages of the service would be lost to a considerable extent if every member of the IES is recruited and assigned only to the State to which he belongs. It should be a convention that only about 50 per cent of the IES officers are assigned to their own States; and there should also be the possibility of inter-State transfers (in addition to deputation to the Centre). Hence each member of the IES should be required to study and pass, within a given time after recruitment, tests in two other languages (Hindi and one modern Indian language which is not his mother tongue) at certain prescribed levels.

18.49 The changes we have recommended in the organization of the IES and the corresponding improvement in the remuneration of teachers and research workers are extremely significant. If these are carried out, the IES will strengthen the administration without adversely affecting teaching or research.

**18.50 The State Educational Services.** At present, the State Educational Services are divided into three broad groups—Classes I, Class II and others. In the reorganization of these services, the following points will have to be kept in view:

- (1) There should be an adequate number of posts at higher levels, namely in Class I and Class II. The secretaries of the district school boards should be in Class I. The District

Educational Inspectors (who will be in the IES) should have adequate assistance from officers of Class I and Class II status.

(2) The methods of recruitment would have to be improved. A disturbing trend now seen is to push fresh recruitment to all posts on the administrative side of the State Education Departments lower and lower down the line. In one State, all fresh recruitment to all the departmental posts is done at the assistant masters' level. In such cases, a young talented graduate from the universities is not attracted to the service and all higher posts come to be gradually occupied by those who have risen from the ranks. What is needed is recruitment at three levels: assistant teachers' level; Class II level (50 per cent for freshers and 50 per cent for promotion); and Class I level (75 per cent for freshers and 25 per cent for promotion). There should be, as in the IES, suitable relaxation in age-limit while recruiting at higher levels.

(3) In the pre-Independence period, the main functions of the department were two: the control of educational institutions-public and private-and distribution of grant-in-aid. The entire cadre of the department consisted, therefore, of 'generalists', i.e. persons who had some initiation into education (as indicated by the B.T. or a similar degree) or had some experience of teaching. Their were a few special posts (e.g., Inspector of Audio-Visual Education), no doubt; but there was no special training for the purpose and anyone could be appointed to the post and expected to learn his job by doing. Even inspections were 'general' in the sense the teaching of all subjects and look after all aspects of the school life. By and large, this tradition has continued to this day. But it has outlived its utility. With the enlargement of the functions of the Education Departments and the heavy responsibilities it has now come to assume for the improvement of education, the need for specialized officers has increased. For instance, curricular reform has assumed great significance; and yet there is not one specialist in curriculum in all the State Education Departments. Similar observations could also be made about other fields of education such as evaluation, textbooks, etc. One of the major reforms now needed is to reorganize the State Education Departments where necessary, on the basis of specialized functionaries (the need for whom is universally recognized) and, what is even more urgent and important, to make adequate arrangements for their specialized training with the help of the universities. These specialist officers (who will include subject inspectors) will be appointed at two levels-at the directorate and on the district staff.

(4) There are several anomalies in the salaries of departmental staff in the States and Union Territories. Two of these deserve notice:

(i) Should the scales of pay in the administrative wing of the Education Department be the same as in its teaching wing or should they be different ? At present, three practices are in vogue. In some States, they are identical; in some, the scales of pay on the teaching side are kept higher, while in others, it is the other way round. The ideal position would be to keep the scales of pay identical but to add allowances either to the teaching or to the administrative side, to make up for the inconveniences, losses or disadvantages, such allowances being payable only so long as the person occupies the post. Such a system



would make for easier transferability between the two wings and promote traffic both ways.

(ii) The scales of pay of the departmental staff (Class I and II) are made comparable, not with the UGC scales of pay, but with those of similar posts in other departments. This creates difficulties for the transfer of persons from the teaching to the administrative wing. We would recommend that the scales of pay of the departmental staff should be correlated with the UGC scales of pay for university teachers.

**18.51 Training of Educational Administrators.** The existing facilities and arrangements for the training of educational administrators are inadequate. Pre-service education for administrators is neither necessary nor possible. It is true that educational administration is one of the subjects taught on an optional basis in the courses of the M. Ed. degree in some training colleges and university departments of education. The number of places available in these courses is very limited. Their standard leaves a good deal to be desired because they are taught by persons who themselves have little experience of administration, because the literature available on Indian conditions and practices is very limited and because there are hardly any facilities for giving practical training to the students. Such pre- service education can only be of limited use and one has largely to rely on in-service education for the training of educational administrators.,

18.52 Unfortunately, there is little or no provision for such training opportunities at present in any State Education Department. This is all the more surprising because the efficacy of training is the basic assumption in education. Training for an educational administrator is needed, not only because the tasks he is required to perform are difficult and complex, but mainly because it is necessary to orient him to the programme of educational expansion and improvement which has to be implemented in the next two decades and to the role which educational administration should play therein. From this point of view, we make the following recommendations:

(1) At the non-gazetted level, the number of officers is very large and arrangements for their in-service training would necessarily have to be made at the State level. We recommend that the State Institutes of Education, in collaboration with the universities, where necessary, should organize the in-service education programmes of all the non-gazetted educational staff on the administrative and inspectional side. The objective should be to provide an in-service training of about two months to every officer in every five years of his service. In addition, they should also organize conferences, seminars, and workshops for the gazetted staff.

(2) At the level of the gazetted officers, the number in any given State is not large enough for developing a training 'institution at the State level. We, therefore, recommend that the Ministry of Education should run a National Staff College for senior educational administrators of the State Departments of Education.

(3) The task of an educational administrator is generally so heavy that he gets no time to read and to keep himself abreast of educational thought. The programmes of in-service

education recommended above will correct this weakness to a great extent. In addition, it will be desirable to revive the old practice of giving three months' leave on full pay for every five years of service, for undertaking special studies in educational problems. Preferably still, the idea of a sabbatical year of leave should be extended to senior posts in administration. He should also have the option to add to this his unutilized privilege leave (which now more or less lapses), if he desires. The only condition attached to this leave should be that the officer should submit a report on his studies at the end of the leave period.

(4) Some incentives should be provided for the officers who improve their qualifications materially through programmes of in-service education.

**18.53 National Staff College for Educational Administrators.** We attach importance to the establishment of the National Staff College for Educational Administrators and would like to indicate broadly the manner in which it should function.

(1) The object of the college should be to provide in-service education, for about eight weeks, in every five years of service, to all the senior officers in the education service-IES and State Educational Services (Class I and Class II).

(2) It should have a permanent and whole-time staff of its own. In addition, it should use, as resource personnel, senior officers of the Education Departments and the Ministry of Education. As educational administration cannot function in isolation, competent persons from other departments also should be utilized for purposes of training. This will incidentally serve an important objective of such training, namely, to bring the young recruits to the cadre in living contact with senior officers.

(3) It should have a research wing where studies would be conducted in problems of educational administration. It should maintain a good library of books on the subject, both Indian and foreign. Besides, it should also function as a clearing-house of administrative procedures and practices in the States and Union Territories.

(4) As very little material on Indian conditions is available for purposes of training, the college should be established immediately and its first assignment should be to prepare a number of case studies and other data which can be utilized for conducting the training programmes. This may well take about one or two years. It is only when a thorough preparation of this type is made that the training programmes should be started.

(5) It should conduct two types of courses; a longish induction course should be provided for new recruits and shorter courses of 3-6 weeks for officers already in service.

(6) In every course conducted at the college, some officers from every State and a few from the Union Territories should be included. It should be an object of policy to cross-fertilize administrative experience.

(7) it should conduct periodical conferences, seminars and work- shops on matters relating to educational administration.

(8) It should conduct a journal on educational administration and maintain a publication wing.

**18.54 Increasing the Strength of the Department.** The most common complaints that were placed before us by the State Education Departments were: they are understaffed; the growth in the departmental staff does not precede but follows the growth in the number of educational institutions and is never able to keep pace with it; norms fixing the number of officers required on the basis of educational institutions, teachers and students, distances involved, problems of transportation and such other relevant factors are not generally fixed and, even if fixed in theory, are not observed in practice; the expenditure for increasing the departmental staff always has a low priority and is not sanctioned automatically when programmes of expansion are approved; and the axe of retrenchment within education falls, more often than not, on the departmental staff. Most of these complaints are genuine. We recommend a reversal of these policies, subject to one reservation. It is better to have a fewer officers at a higher level than a large number of officers at a lower level and on inadequate scales of pay. Our recommendations regarding the new techniques for administration and supervision provide for this;<sup>238</sup> and this point should be kept in view in the proposed reorganization of the State Education Departments.

## PROCEDURES

**18.55 The Present Position.** The existing procedures in educational administration suffers from an excessive emphasis on uniformity and rigidity. In every State, we heard complaints by the headmasters of government schools that almost every detail of the life of a school was regulated by the orders of the Department. The managements of private institutions also complained of rigid departmental attitudes and attempts at controlling even the smallest details. The need to change these old traditions cannot be over-emphasized. The idea of creating uniformity and regulating the educational process through comprehensive departmental codes has been overdone and has killed all freedom and initiative and reduced experimentation to the minimum. We must now initiate a new process under which the administration win be distinguished by elasticity and dynamism. As Dr. J. W. Gardner observes: 'The rule book grows bigger as the ideas grow fewer. Thus almost every well-established organization is a coral reef of procedures that were laid down to achieve some long-forgotten objective. An organization must therefore have some means of combating the process by which men become prisoners of their own procedures.'

<sup>238</sup>Chapter X.

**18.56 Introducing Elasticity and Dynamism.** How can this elasticity and dynamism be introduced in educational administration ? We have made a number of suggestions in this regard in the earlier chapters. Here we would like to emphasize some general suggestions:

(1) The first is a change in the attitude of the administrator. He should cultivate an openness of mind and a spirit of inquiry rather than a rule-of-thumb approach which tries to stick to established practices, even when they cease to be meaningful. It is here that research in educational administration and the in- service training of educational administrators can play a significant role.

(2) The second is to establish a practice of holding periodical reviews, say, every three to five years, of important administrative practices, with a view to chopping off dead wood and putting in fresh grafts, where necessary.

(3) The third is to build up, inter-State contacts and to encourage comparative studies in different State practices in all administrative matters. The study of educational administration developed in the USA out of one peculiar feature: the variety of administrative practices in the different States which arose from the fact that education was a State subject. This variety led to a comparative study of different practices in each aspect of administration. This comparison was originally restricted to mere tabulations which showed the differences. But it soon led to a discussion about the origin of these differences, the fundamental principles on which each such practice should be based, and a comparison of the relative advantages and disadvantages of different practices. Out of this arose a science of educational administration and when the States were confronted with those comparative studies year after year, they were stimulated to think and to make innovations. This happy and fruitful cross- fertilization of administrative practices has not occurred in India.<sup>239</sup> There are hardly any comparative studies it has conducted or promoted in educational administration with the result that the intellectual contact between the different State Education Departments is very little. We find officers in every State Education Department who know about the USA, the UK, or the USSR, but they do not know what is happening in other States of India. If periodical comparative studies in educational administration could be prepared and the State Education Departments closely involved with them, the sad picture would soon disappear and administrative efficiency will begin to rise.

(4) An area in which there is scope for improvement in our administrative practices is that of project preparation. Modern administrative practices in both the armed forces and industry require a systematic analysis and preparation before an operation or new activity` is launched. In education, too often the practice is to describe a scheme in a page or two with some sketch of the budget required and to begin operation with no more

<sup>239</sup>One illustration may suffice. A comparative study of the systems of grant-in-aid, an important issue, was first made by the Indian Education Commission in 1882; it was repeated by Ritchie in 1922, and has not been done since.

preparation than this. Where large sums of money are to be spent, a series of preparatory steps are all justified beginning from feasibility studies and going through to detailed, step-by-step plan of operations for the project. This detailed programming of the planned projects will ensure more economic use of resources and more detailed evaluation of the progress being made in project implementation. The evolution of this technique and the training of officers in them is the responsibility of the State Institutes of Education and the National Staff College for Educational Administrators.

(5) The traditional system of administration is based on the principle of having a few officers who are assisted by a large army of superintendents, assistants and clerks, because it was originally devised at a time when the administration had to be run by a few Englishmen with the assistance of a large number of Indians in subordinate positions. Under a system of this type, most of the work tends to be done by unimaginative persons at a lower level who were described by Burke as the 'tyrants of the desk'. This is one contributory cause to the rigidity of the system. We, therefore, recommend that the modern 'officer- oriented system' where most of the work will be done by officers at their own level with the help of a small secretariat staff should be adopted.

**18.57 Education Acts.** At present the educational legislation in the country presents a motley picture: in most States, it is scattered in a number of laws and the A of it is still in the form of executive orders, the only State to have an Education Act being Kerala. We, therefore, recommend that education should be given a statutory basis everywhere and in all sectors and that an Education Act should be passed in all the States and Union Territories. This should be a comprehensive and consolidating measure which will replace all the miscellaneous laws which now exist and which will also provide a statutory basis for certain important aspects of administration (for example, grant-in aid code) which now exist merely in the form of executive orders.

18.58 We also recommend that the Government of India should issue a statement on the national policy in education which should provide guidance to the State Governments and the local authorities in preparing and implementing education plans in their areas. The possibility of passing a National Education Act may also be examined.

## SUMMARY

**1 Planning.** (1) There has been an over-emphasis on achievement of targets in enrolments and expenditure and there is, therefore, a need to take a more comprehensive view and evolve a broader pattern of goals, especially those relating to qualitative improvement.

(2) The general policy so far has been to do something in every sector of every programme with the result that the meagre resources available have been spread thinly over a very large area leading to considerable wastage. It has now become important to concentrate on a few crucial programmes.

(3) In the existing situation where finances are limited, programmes which call for a determined effort, organization, talent and hard work rather than large financial investment, need greater emphasis.

(4) There should be deep involvement of universities, professional organizations, training colleges, etc., in a periodical evaluation of all major programmes included in the Plans and in the development of a large-scale research programme.

(5) The Ministry of Education, in collaboration with the Asian Institute of Educational Planning, should undertake studies of educational planning in the different States and conduct intensive courses for training the personnel involved in the planning process at different levels.

(6) The University Grants Commission should also consider the possibility of setting up an Advanced Centre for Studies in Educational Planning, Administration and Finance.

(7) The process of educational planning in a federal democracy has to be the right blend of centralization in the appropriate sectors and especially in administration. One useful suggestion which can be made in this context is to adopt a system of priorities at different levels national, State and local.

(8) School education is predominantly a local-State partnership and higher education is a Centre-State partnership. It is this basic principle that should guide the evolution of the delicate balance between centralization and decentralization which our planning needs.

**2 The Role of Private Enterprise.** (1) The future role of private enterprise in education should be broadly on the following principles:

(a) As most private enterprise has played an important role in the development of education in modern India, the State should make all possible use of the assistance that can come from the private sector for the development of education.

(b) The State has now rightly assumed full responsibility to provide all the needed educational facilities, and private enterprise can, therefore, have only a limited and minor role. 18.09-11

**3 The Role of Local Authorities.** The normal practice should be that a local authority gets the right to administer education as a privilege, subject to two conditions-good administration and promoting the cause of education-and that this privilege would be withdrawn if any of these conditions is violated. The future role of local bodies in education may be defined as follows:

(1) As an ultimate objective, it is essential that schools and their local communities should be intimately associated in the educational process.

(2) It would, however, not be proper to press for the universal and immediate adoption of this principle without reference to local conditions.

(3) The immediate goal in this respect-and this should be adopted immediately as a national policy in all the States-is to associate the local communities, namely, village panchayats in rural areas and the municipalities in urban areas, with their local schools and to make them responsible for the provision of all non-teacher costs with the help, where necessary, of a suitable grant-in-aid from the States.

(4) The ultimate goal to be reached is the establishment, at the district level, of a competent local education authority which may be designated as the District School Board and which would be in charge of all education in the district below the university level. This should also be accepted as national policy.

(5) In all association of the local authorities-with education, adequate safeguards should be provided to ensure that the teachers are not harassed and that they do not get involved in local factions and politics.

**4 District and Municipal Boards.** (1) The jurisdiction of the District School Board should cover the entire area of the district with one exception, namely, the big municipalities in the district. The Zila Parishad, municipalities, educationists and concerned departments should be represented on it. A senior officer of the State Government should be the whole-time secretary of this Board, which should be provided with the necessary administrative and supervisory staff.

(2) The functions of this Board would cover all school education in the district-general as well as vocational. It will directly administer all government and local authority schools within the district, and it will also remain in charge of giving grants-in-aid to all private institutions in the district in accordance with the rules framed by the State Government for the purpose.

(3) It should be a responsibility of the Board to prepare plans for the development of school education within the district and it should also be the principal agency within the

district to develop school education, the finances and guidance required for the purpose being provided by the State Government and the State Education Department.

(4) In big towns with a population of one lakh or more, it would be desirable to establish Municipal School Boards on the above lines since these would be viable administrative units. The composition, powers and responsibilities of these Boards should be similar to those of the district school boards.

(5) Each school board will maintain an education fund. The Zila Parishads (or Municipalities) will approve the budget of the school boards. They will also raise the resources expected of them and credit them to the School Board. In all day-to-day administration, the School Board would be autonomous. The same relation would hold good between a Municipal School Board and its Municipality.

(6) Recruitments and transfers will be done by a special committee consisting of the Chairman of the Board, its Secretary and the District Education Officer, subject to rules framed by the State Government, the general policy being to reduce transfers to the minimum and to allow teachers to develop loyalties to individual institutions.

(7) It may be better in some cases not to burden the school boards with full administrative responsibility all at once. Powers may be conferred on a board as it becomes experienced and shows its capacity to exercise them. 18.12-24

**5 The Role of the Central Government.** (1) Besides institutions in the scientific and technical sector, it is also necessary for the Centre to establish institutions specializing in social sciences including pedagogical sciences and the humanities. These should be established in close association with the universities and be an integral part of the university system.

(2) The Centre can also develop education in the Union Territories, particularly in Delhi, to serve as a pace-setter for the other areas.

(3) The Centre should scout for talent in different fields and make the services of the best people in the country available to the State Governments for advice and assistance in all matters.

(4) Funds for specific special programmes in the educational sector within the State Plans may not be earmarked. The total allocation for education, however, should not be altered without the approval of the Planning Commission. But within it, the State Governments should be free to use funds at their discretion.

(5) Considerable importance should be attached to the expansion of the Central and the centrally sponsored sector. It is through this mechanism that the Centre will be able to stimulate and guide educational developments in the national interest in crucial sectors.



(6) Education should not be fragmented keeping one part in the concurrent and the other in the State list. In a vast country like ours the position given to education in the Constitution is probably the best because it provides for a Central leadership of a stimulating but non-coercive character. The greatest need is for elasticity and freedom to experiment.

(7) An intensive effort should be made to exploit fully the existing provisions of the Constitution for the development of education and evaluation of a national educational policy. The problem may then be reviewed again after ten years. 18.25-30

**6 Ministry of Education.** (1) The present practice of giving the post of Secretary to the Government of India to an eminent educationist, who is designated as Educational Adviser to the Government of India and Secretary to the Ministry of Education should continue. This should be a selection post and the selection should be made from amongst all persons available, official, non-official, IES, university men, etc. It should also be a tenure post given only for six years in the first instance, with an extension in exceptional cases for three or four years but not renewable further.

(2) About half the posts of additional or joint secretaries should be filled by promotion from officers seconded from the State Education Departments and the remaining half should be filled from eminent educationists and outstanding teachers in universities and schools. The term of each tenure should be five years to be renewable at the most for a second term.

(3) The clearing-house function of the Ministry of Education needs considerable strengthening and expansion. A well-staffed Division should be created to perform this function on an adequate scale.

(4) The Ministry of Education may set up a committee to examine the various types of studies required and to prepare a programme for action.

(5) It is a major responsibility of the Ministry of Education to maintain a good statistical service for educational planning, policy-making and evaluation. In order that this function may be discharged properly, the Statistical Section of the Ministry should be reorganized and strengthened along the lines recommended. The statistical units of the State Departments of Education will have to be reorganized and strengthened likewise.

(6) The Central Advisory Board of Education with its standing committees should be functionally strengthened. 18.31-35

**7 National Council of Educational Research and Training.** (1) The NCERT should be developed as the principal technical agency functioning at the national level for the improvement of school education and operating through and in collaboration with the National Board of School Education, State Departments of Education and their technical agencies like the State Institutes of Education.

(2) The governing body of the NCERT should have an all-India character with a majority of non-officials. It is desirable to have at least one outstanding teacher from secondary schools and a person specializing in primary education, preferably a primary teacher.

(3) The Council should have its own full-time Director and joint Director. The Director should be an eminent educationist in the field and his status should be that of a vice-chancellor. His term of office should be five years, renewable for not more than one term. The joint Director would be needed mainly for the purpose of assisting the Director and relieving him of routine administrative matters.

(4) The Central Institute of Education, under the NCERT, should be transferred to the Delhi University.

(5) It is desirable that there should be considerable interchange and flow of officers from the NCERT to the State Education Departments and vice versa.

(6) The campus of the NCERT should be developed speedily and the building programme given the highest priority. 18.36

**8 Educational Administration at the State Level.** (1) It is desirable to create, at the State level, some machinery to coordinate educational programmes which are spread over a number of departments and take a unified view for purposes of planning and development.

(2) A statutory Council of Education should be created at the State level with the State Minister for Education as the Chairman. Its membership should include representatives of universities in the State, all Directors in charge of different sectors of education and some eminent educationists. Its principal functions would be to advise the State Government on all matters relating to school education, to review educational developments in the State and to conduct evaluation of programmes from time to time through suitable agencies. Its annual report along with its recommendations should be presented to the State legislature.

(3) A standing committee at the officers' level which would include all State level officers in charge of different sectors of education should meet periodically under the chairmanship of the Education Secretary.

(4) The Education Secretary also, like the Educational Adviser to the Government of India, should be an educationist rather than an administrative officer. It will be desirable to make this appointment a tenure post.

(5) Broadly speaking, the role of the Education Secretariat should be to examine educational problems from the administrative and financial point of view and in the wider context of governmental policies for development. It should give due weightage to the views of the Directorate in technical matters and assist the Director to function as the effective head of the Department. 18.37-42

**9 Indian Educational Service.** (1) The Indian Educational Service should be a service agency to teaching and research and should consist of persons who have teaching experience with the possibility of the educational administrator returning to teaching and the teacher going over to administration at least on a tenure assignment. Its method of recruitment should be as follows:

(a) Only one-third of the posts should be filled by direct recruitment at the level of the junior scale. Even these selected persons should not be placed in administration direct. Their first assignments for a minimum period of 2-3 years should be in teaching and it is only after this initiation that they should be assigned to administration.

(b) The remaining two-thirds of the posts should be filled partly by direct recruitment and partly by promotion at the level of the senior and higher scales.

(c) Some posts of the IES should be available for being filled by tenure appointments of teachers for specified periods. In the same way, some posts in teaching and research should also be available for tenure appointments of persons from the IES.

(2) As there are insuperable difficulties, the idea of creating a teaching wing in the IES should be abandoned. The service should encadre only the posts of Directors and officers of the Directorate, District Educational Officers and headmasters of higher secondary schools in the State, and at the Centre, educational officers of the Ministry of Education and, other Ministries and Education Departments of Union Territories.

(3) An adequate number of posts comparable to the higher scales of pay in the IES should be created in the universities and colleges to prevent a drain of talent from teaching and research to administration.

(4) It should be a convention that only about 50 per cent of the IES officers are assigned to their own States and there should also be a possibility of inter-State transfers (in addition to deputation to the Centre). To facilitate this, each member of the IES should be required to study and pass, within a given time after recruitment, tests in two other languages (Hindi and one more Indian language which is not his mother-tongue) to certain prescribed depth. 18.44-49

**10 State Educational Service.** (1) There should be an adequate number of posts at higher levels, namely, in Class I and Class II. The Secretaries of the District School Boards should be in Class I. The District Educational Inspectors (who will be in the IES) should have adequate assistance from officers of Class I and Class II status. In order to attract talented persons, recruitment is needed at three levels: Assistant Teachers' level; Class II level (50 per cent for freshers and 50 per cent for promotion) and Class I level (75 per cent for freshers and 25 per cent for promotion).

(2) A major reform now needed is to reorganize the State Education Departments where necessary on the basis of specialized functionaries and what is even more urgent and

important is to make adequate arrangements for their specialized training with the help of the universities.

(3) To reduce anomalies in the salaries of the departmental staff and enable transferability, it is proposed that (a) the scales of pay in the teaching and the administrative wings should be identical and (b) the scales of pay of the departmental staff should be correlated with the UGC scales of pay for university teachers. 18.50

**11 Training of Educational Administrators.** (1) The State Institutes of Education, in collaboration with universities where necessary, should organize the in-service educational programmes of all the non-gazetted staff on the administrative and inspectional side. In addition, they should also organize conferences, seminars and workshops for the, gazetted staff.

(2) The old practice of giving furlough leave to administrators for undertaking special studies in educational problems should be revived.

(3) Some incentives should be provided for the officers who improve their qualifications materially through programmes of in- service education. 18.51-52

**12 National Staff College for Educational Administrators.** The Ministry of Education should establish a National Staff College for Educational Administrators. It should provide in-service education for all the senior officers in the Educational Services-IES and State Educational Services. It should conduct two types of courses: a longish induction course for new recruits and shorter courses of three to six weeks for officers in service. It should have a research wing for conducting studies in problems of educational administration and function as a clearing- house of administrative procedures and practices in the States and Union Territories. It should also conduct periodical conferences, seminars and workshops on matters relating to educational administration. 18.53

**13. Education Departments.** The present position in most States is that the Education Departments are under-staffed because the growth of the departmental staff does not precede but follows the growth in the number of educational institutions; the norms fixing the number of officers required are not, even if fixed, observed in practice; the expenditure for increasing the departmental staff always has a low priority. The reversal of these policies is necessary, subject to one reservation, viz., it is better to have a fewer officers at a higher level and on adequate scales of pay than a large number of officers at the lower level. 18.54

**14. Procedures.** (1) There should be a change in the attitudes of administrators who should cultivate an openness of mind and a spirit of enquiry rather than a rule-of-the-thumb approach which tries to stick to established practices even when they cease to be meaningful.

(2) The practice of holding periodical reviews, say, every three or five years, of important administrative practices with a view to chopping off dead wood and putting in fresh grafts where necessary should be established.

(3) inter-State contacts should be built up and comparative studies in different State practices in all administrative matters should be encouraged. Periodical comparative studies in educational administration which would involve the State Education Departments closely should be made.

(4) The evolution of the technique of detailed programming of the plan projects and the training of officers in them is the responsibility of the State Institutes of Education and the National Staff College for Educational Administrators.

(5) The modern 'officer-oriented' system where most of the work will be done by the officers at their own level with the help of a small secretariat staff should be adopted. 18.55-56

**15 Education Acts.** (1) Education should be given a statutory basis everywhere and in all sectors, and Education Acts should be passed in all the States and Union Territories. These should be comprehensive and consolidated measures which will replace all the miscellaneous laws which now exist and which will also provide a statutory basis for certain important aspects of administration (e.g., grant-in-aid code) which now exists merely in the form of executive orders.

(2) The Government of India should issue a statement on the national policy in education which should provide guidance to the State Governments and the local authorities in preparing and implementing educational plans in their areas.

(3) The possibility of passing a National Education Act may also be examined. 18.57-58

## **CHAPTER XIX**

### **EDUCATIONAL FINANCE**

19.01 In this chapter, we shall examine a few major issues relating to the financing of education. These will mainly include a survey of the growth of educational expenditure in India in the post- Independence period and of the sources of educational finance. We shall also refer to the extent of financial resources likely to be available for education during the next two decades, their appropriate allocation to various sectors and priorities involved. The questions of fundamental importance that arise are

- What should be the total level of financial support for education at all levels to ensure achievement of national goals and rapid advancement of national economy, cohesion and security ?
- What judgment and guidelines can be formulated, and with what degree of reliability and confidence, about the distribution of funds between different levels or stages of education (including research) and different sectors within a level ?
- Although quality and quantity are inseparable, what proportions of the total resources should be broadly devoted to improvement of quality and consolidation and to the expansion of education ?

These questions, by their very nature, do not admit of precise answers because they are not questions in arithmetic or production engineering but in human dynamics involving complex sociological considerations. Difficulties really arise when one tries to give precise values to quantities which are essentially vague. However, if dealt with in the proper perspective, the exercise affords insight and helps the process of decision-making.

#### **TOTAL EDUCATIONAL EXPENDITURE (1950-65)**

19.02 The discussion may conveniently begin with an examination of the manner in which the total educational expenditure has increased in the post-Independence period. In 1946-47, the total educational expenditure in 'British' India was Rs. 577 million which worked out at only Rs. 1.8 per head of population. At the end of the Third Plan, the total expenditure on education is estimated at Rs. 6,000 million or approximately Rs. 12 per capita (at current prices). The details will be found in Table 19.1.

TABLE 19.1. TOTAL EDUCATIONAL EXPENDITURE IN INDIA (1950-51 to 1965- 66)

|   | 1950-51    | 1955-56     | 1960-61    | 1965-66<br>(estimated) |
|---|------------|-------------|------------|------------------------|
| 1. Total educational expenditure from all sources (Rs. in millions) | 1,444      | 1,897       | 3,444      | 6,000                  |
| 2. Index of growth  | 100        | 166         | 301        | 524                    |
| 3. Educational expenditure per capita (Rs.)                         | 3.2        | 4.8         | 7.8        | 12.1                   |
| 4. Index of growth  | 100        | 150         | 244        | 378                    |
| 5. Total national income (at current prices) (Rs. in millions)      | 95,300     | 99,800      | 141,400    | 210,000                |
| 6. Index of growth  | 100        | 105         | 148        | 220                    |
| 7. National income per Capita (at current prices) (Rs)              | 266.5      | 255.0       | 325.7      | 424.4                  |
| 8. Index of growth  | 100        | 96          | 122        | 159                    |
| 9. Total educational expenditure as percentage of national income   | 1.2        | 1.9         | 2.4        | 2.9                    |
| 10. Index of growth   | 100        | 158         | 200        | 242                    |
|   | First Plan | Second Plan | Third Plan | All Three Plans        |
| 11. Average annual rate of growth of total educational expenditure  | 10.6%      | 12.7%       | 11.8%      | 11.7%                  |

Source. The educational data for 1950-51, 1955-56 and 1960-61 have been taken from Form A of the Ministry of Education. Those for 1965-66 have been estimated in the Commission's Secretariat. The data relating to National Income are taken from CSO (the figure for 1965-66 is a rough estimate).

N.B. The total educational expenditure given here does not include:

(1) expenditure incurred by the guardians of the students on their education, except fees paid;

(2) the 'opportunity costs' which are defined as the forgone income which would have been earned by the students if they had engaged themselves in some direct or indirect productive activity instead of attending the school;

(3) the expenditure figures of unrecognized institutions;

(4) the expenditure on pensions due to retired employees of Government in the Education Department (inclusive of teaching and non-teaching staff); and

(5) the expenditure on administration and other expenditure of private societies conducting educational institutions. it will be seen that, during the first three plans

- the total educational expenditure 'increased from Rs. 1,144 million in 1950-51 to Rs. 6,000 million in 1965- 66, which denotes a total increase of 424 per cent in a period of 15 years or a cumulative annual increase of 11.7 per cent. This has varied but little from plan to plan-it stood at 10.6 per cent in the First Plan, rose to 12.7 per cent in the Second, and dropped to 11.8 per cent in the Third.

- the total educational expenditure per capita rose from Rs. 3.2 at the beginning of the First Plan to Rs. 4.8 at the end of the First, Rs. 7.8 at the end of the Second and Rs. 12.1 at the end of the Third-an overall increase of 278 per cent;

- the total educational expenditure represented 1.2 per cent of the national income in 1951. This proportion rose to 1.9 per cent at the end of the First Plan, 2.4 per cent at the end of the Second and 2.9 per cent at the end of the Third. This represents an increase of 142 per cent in 15 years.

- the rate of growth of the educational expenditure in the first three plans (11.7 per cent) is 2.2 times the rate of growth of national income at current prices (5.4 per cent). It is 1.6 times the rate of growth of enrolment and 1.7 times the rate of growth in the number of teachers.<sup>240</sup>

<sup>240</sup>During this period the total enrolment in educational institutions has increased from 24.287 million in 1950-51 to 70.292 million in 1965-66 which shows an average annual rate of growth of 7.3 per cent per year. The number of teachers has also increased from 798,192 in 1950-51 to 2,168,786 in 1965-66 which shows a rate of growth of 6.9 per cent per year.



19.03 Three points need emphasis in this context. The first is that the total educational expenditure given in the preceding table is at current prices. Unfortunately, no effort has been made so far to convert the educational expenditure in the country to constant prices. We began this exercise, but it could not be completed due to absence of necessary data. We, however, recommend that such an exercise should be taken up and completed as early as possible. The UGC may consider giving financial assistance to a well-established department of economics of a university for this purpose. We may, however, point out that, during this period, the wholesale price index has risen by about 53 per cent and the cost of living index for the working classes by about 65 per cent. Although these indices cannot be used to reduce the total educational expenditure to constant prices, they indicate that a good deal of the increase in total educational expenditure is due merely to a rise in the price level.

19.04 The second point is that the proportion of national income devoted to education in India is small in comparison with that in educationally advanced countries of the world. The absolute amount per capita spent by us on education is about one-hundredth of that spent by a highly industrialized country like the USA. This reflects the close interaction and interlocking between the level of education and the level of industrialization. Japan and the USA and the USSR are spending considerably more than 6 per cent of their GNP on education, about twice as much as India. In making international comparisons, however, one should not miss the important point that in countries with low levels of national incomes, the disposable surplus is much smaller and it is, therefore, far more difficult for them to make a given effort for education than for those countries which have a comparatively higher income per capita and, in consequence, a larger disposable surplus. For instance, an educational expenditure of 3 per cent of the national income in India, where the national income per head is only about Rs. 400, has to be regarded as a much higher degree of 'effort' than an expenditure on the same or even higher percentage of the national income in the UK, or the USA.

19.05 The third point is that the increase of educational expenditure has been much faster than that of the growth of economy. The overall resources available to education are a function of two variables-ability or the national income per head of population and effort or the proportion of national income allocated to education. During the first three plans, ability has shown a relatively lower rate of growth. Between 1950 and 1965, the total national income rose from Rs. 91,400 million in 1950-51 to Rs. 163,600 million in 1965-66 (at 1960-61 prices) which implies that the national economy grew only at about 4 per cent per year and that the income per head of population increased only from Rs. 256.5 to Rs. 330.7 which implies a growth-rate of only 1.7 per cent per year. It is unfortunate that, in 1965-66, there has been a bad failure of the monsoon so that the net national product in the primary sector has been very adversely affected and the total national income threatens to be about 3 per cent less than that in 1964-65. But even if this year is set aside, the growth in total national income between 1950-51 and 1964-65 would be only 4.5 per cent per year and that in the per capita income (from Rs. 256.5 to Rs. 348.7) only 2.2 per cent per year. Since the precise figures of educational expenditure at constant prices are not available, it is not possible to compare the rate of growth of ability, at constant prices, with the rate of growth of effort. But there is enough indirect evidence

available to show that, even at constant prices, the rate of growth in educational expenditure far exceeds that in the national income.

19.06 A more precise comparison is, however, possible at current prices. As shown in Table 19.1 the national economy has grown at 5.4 per cent per year during the first three plans while educational expenditure has grown at the rate of 11.7 per cent per year. The effort or the national income devoted to education has thus increased at more than twice the rate of ability or national income.

### **PATTERN OF EDUCATIONAL EXPENDITURE (1950-65)**

19.07 We may now pass on to examine how the available financial resources are allocated to different sectors and programmes of education at present. From this point of view, the data regarding educational given in Table 19.2.

N.B. The educational expenditure given in Table 19.2 is divided into two categories-direct and indirect-in accordance with the classification adopted by the Ministry of Education. Some clarifications are, however, necessary to relate this classification to the usual classification of 'recurring' and 'capital' expenditure. AR expenditure which is classified as 'direct' is recurring in character. All items of expenditure classified as 'indirect' are also recurring except in the case of 'buildings'. (This bead includes all capital expenditure on buildings but does not include expenditure on their maintenance.) Expenditure shown under hostels includes only the maintenance charges but does not include the capital expenditure on the construction of hostel buildings and the food charges of the inmates.

19.08 It will be seen that the indirect expenditure given in Table 19.2 is not divided according to different stages or sectors of education. We, therefore, divided this expenditure, on the assumptions given below, into two sectors-school and university. Our calculations are given in Table 19.3.

19.09 On the basis of the above break-up, the expenditure at the three levels of education will be as shown in Table 19.4.

19.10 In the initial stages of development, the total expenditure on education is generally low and the bulk of it is spent on school education. As societies become industrialized, the total expenditure on education begins to grow and an increasingly larger part of it comes to be devoted to higher education and research. This broad trend is maintained in spite of the increase that takes place in the expenditure on school education on account of universalisation of primary education, expansion (or even universalisation) of secondary education, and the

TABLE 19.2 EDUCATIONAL EXPENDITURE BY OBJECTS IN INDIA (1950- 51 to 1965-66)

| Object   | Total expenditure<br>(Rs. in 000's) |           | Percentage<br>of total<br>expenditure<br>growth |         | Average<br>annual<br>rate of |
|--|-------------------------------------|-----------|---|---------|------------------------------|
|  | 1950-51                             | 1965-66   | 1950-51   | 1965-66 |                              |
| <b>A. Direct Expenditure</b>                       |                                     |           |   |         |                              |
| 1. Pre-Primary Schools                             | 1,198                               | 11,000    | 0.1   | 0.2     | 15.9                         |
| 2. Lower Primary Schools                           | 364,843                             | 1,220,500 | 31.9  | 20.3    | 8.4                          |
| 3. Higher Primary Schools.                         | 76,990                              | 717,500   | 6.7   | 12.0    | 16.0                         |
| TOTAL (FIRST LEVEL)                                | 443,031                             | 1,949,000 | 38.7  | 32.5    | 10.4                         |
| 4. Secondary Schools                               | 230,450                             | 1,181,000 | 20.1  | 19.7    | 11.5                         |
| 5. Vocational Schools                              | 36,944                              | 250,000   | 3.2   | 4.2     | 13.6                         |
| 6. Special Schools                                 | 23,335                              | 39,920    | 2.0   | 0.7     | 3.6                          |
| 7. Boards of Secondary/In-<br>termediate Education | 5,338                               | 45,000    | 0.5   | 0.8     | 15.3                         |
| TOTAL (SECOND LEVEL)                               | 296,067                             | 1,515,920 | 25.9  | 25.3    | 11.5                         |
| 8. Universities                                    | 49,052                              | 270,000   | 4.3   | 4.5     | 12.0                         |
| 9. Research Institutes                             | 6,256                               | 65,000    | 0.5   | 1.1     | 16.9                         |
| 10. Colleges for Arts and<br>Science               | 71,714                              | 327,500   | 6.3   | 5.5     | 10.7                         |
| 11. Colleges for Profe-<br>ssional Education       | 42,194                              | 350,000   | 3.7   | 5.8     | 15.1                         |
| 12. Colleges for Special<br>Education.             | 2,224                               | 17,500    | 0.2   | 0.3     | 14.7                         |
| TOTAL (THIRD LEVEL)                                | 171,440                             | 1,030,000 | 15.0  | 17.2    | 12.7                         |

|                                  |           |           |       |       |      |
|----------------------------------|-----------|-----------|-------|-------|------|
| 13. TOTAL (DIRECT)               | 910,539   | 4,494,920 | 79.6  | 74.9  | 11.2 |
| <b>B. Indirect Expenditure</b>   |           |           |       |       |      |
| 14. Direction and Inspection     | 27,364    | 114,009   | 2.4   | 1.9   | 10.0 |
| 15. Buildings                    | 99,270    | 666,055   | 8.7   | 11.1  | 13.5 |
| 16. Scholarships, Stipends, etc. | 34,456    | 420,035   | 3.0   | 7.0   | 18.1 |
| 17. Hostels                      | 18,264    | 95,463    | 1.6   | 1.6   | 11.7 |
| 18. Miscellaneous                | 53,928    | 209,518   | 4.7   | 3.5   | 9.5  |
| 19. TOTAL (INDIRECT)             | 233,282   | 1,505,080 | 20.4  | 25.1  | 13.0 |
| 20. GRAND TOTAL                  | 1,143,822 | 6,000,000 | 100.0 | 100.0 | 11.7 |

Source. Ministry of Education, Form A.

TABLE 19.3. INDIRECT EXPENDITURE AT SCHOOL AND UNIVERSITY STAGES

|                             | 1950-51<br>Amount<br>(Rs.in 000's) | Percentage<br>of total<br>expenditure | 1965-66<br>Amount<br>(Rs. in 000's) | Percentage<br>of total<br>expenditure |
|-----------------------------|------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|
| <b>School Education</b>     |                                    |                                       |                                     |                                       |
| 1. Direction and Inspection | 27,364                             | 2.4                                   | 114,009                             | 1.9                                   |
| 2. Buildings                | 39,708                             | 3.5                                   | 133,211                             | 2.2                                   |
| 3. Scholarships             | 24,705                             | 2.2                                   | 210,017                             | 3.5                                   |
| 4. Hostels                  | 5,479                              | 0.5                                   | 19,093                              | 0.3                                   |

|                  |         |      |         |     |
|------------------|---------|------|---------|-----|
| 5. Miscellaneous | 26,964  | 2.4  | 104,759 | 1.7 |
| TOTAL            | 124,220 | 10.9 | 581,089 | 9.7 |

### Higher Education

|                             |         |     |         |      |
|-----------------------------|---------|-----|---------|------|
| 1. Direction and Inspection | ...     | ... | ....    | ...  |
| 2. Buildings                | 59,562  | 5.2 | 532,844 | 8.9  |
| 3. Scholarships             | 9,751   | 0.9 | 210,018 | 3.5  |
| 4. Hostels                  | 12,785  | 1.1 | 76,370  | 1.3  |
| 5. Miscellaneous            | 26,964  | 2.4 | 104,759 | 1.7  |
| <hr/>                       |         |     |         |      |
| TOTAL                       | 109,062 | 9.5 | 923,991 | 15.4 |
| <hr/>                       |         |     |         |      |

N.B. (1) The expenditure on buildings has been divided, on the basis of general trends noticed, as 40:60 in 1950- 51 and 20:80 in 1965-66.

(2) The break-up of the expenditure on scholarships for 1950-51 (actuals) is available. That for 1965-66 is an estimate made in the Secretariat of the Commission on the basis of present trends.

(3) The expenditure on hostels is largely at the university stage. It was divided, on the basis of general trends noticed, as 30:70 in 1950-51 and 20:80 in 1965-66.

(4) The miscellaneous expenditure was divided, on an ad hoc basis, in the proportion of 50:50.

(5) Totals do not tally due to rounding.

qualitative improvement of school education. The growth of educational expenditure in Japan as seen in Table 19.5, will show this clearly.

19.11 It will be seen that, in 1885, the expenditure on elementary education in Japan was as high as 84.3 per cent of the total. It has now come down to 42.4 per cent. (In Japan, the duration of the elementary course of education is six years as against seven years recommended by us.) The expenditure on secondary education, which was

TABLE 19.4. EDUCATIONAL EXPENDITURE BY LEVEL

|   | 1950-51 | 1965-66 |
|---|---------|---------|
| 1. First Level, i.e. pre-primary, lower primary and higher primary schools  | 38.7    | 32.5    |
| 2. Second Level, i.e. secondary, special and vocational schools and Board of Secondary Education                      | 25.9    | 25.3    |
| 3. Indirect expenditure on school education   | 10.9    | 9.7     |
| TOTAL   | 75.5    | 67.4    |
| 4. Third Level, i.e. Universities, research institutions, and colleges of general, special and professional education | 15.0    | 17.2    |
| 5. Indirect expenditure on higher education   | 9.5     | 15.4    |
| TOTAL (UNIVERSITY)  | 24.5    | 32.6    |
|   | 100.0   | 100.0   |

N.B. Totals do not tally due to rounding.

TABLE 19.5. EDUCATIONAL EXPENDITURE IN JAPAN (1885-1960)

| Year | Distribution of expenditure by level of education (percentage) |                             |                                 |                  | Percentage of GNP spent on education | GNP in million yen |
|------|--|-----------------------------|---------------------------------|------------------|--------------------------------------|--------------------|
|      | Elementary education I-VI                                      | Secondary education VII-XII | Higher education XIII and above | Teacher training |                                      |                    |
| 1885 | 84.3   | 2.8                         | 8.3                             | 4.6              | 100.0                                | 612                |
| 1890 | 76.9   | 3.1                         | 10.9                            | 9.1              | 100.0                                | 924                |
| 1900 | 67.6   | 16.5                        | 7.0                             | 8.9              | 100.0                                | 1,997              |
| 1910 | 67.4   | 16.7                        | 10.0                            | 5.9              | 100.0                                | 2,888              |
| 1920 | 67.6   | 17.6                        | 10.9                            | 3.9              | 100.0                                | 11,845             |
| 1935 | 61.9   | 18.7                        | 16.9                            | 2.5              | 100.0                                | 15,203             |
| 1940 | 55.7   | 21.8                        | 20.1                            | 2.4              | 100.0                                | 32,183             |
| 1950 | 41.8   | 46.2                        | 12.0                            | ..               | 100.0                                | 3,381,500          |
| 1960 | 42.4   | 44.5                        | 13.1                            | ..               | 100.0                                | 11,821,700         |

Source. Japan's Growth and Education, Ministry of Education, Japan, 1963, Tables 10 and 14.

only 2.8 per cent in 1885, has now risen to 42.5 per cent, (The course of secondary education in Japan extends over six years, for the first three years of which education is compulsory). In higher education, the expenditure has been steadily growing and risen from 8.3 per cent in 1885 to 13.1 per cent in 1960.

19.12 Some idea of the manner in which expenditure is distributed over the different levels of education in other countries can be had from Table 19.6.

TABLE 19.6. PERCENTAGE DISTRIBUTION OF RECURRING EXPENDITURE ON EDUCATION BY LEVEL AND TYPE OF EDUCATION, 1961

| Country                 | Central<br>adminis-<br>tration | Pre-<br>primary<br>and 1st<br>level | Total | Second level |  | Third<br>level | Other<br>types<br>of<br>education | Total |
|-------------------------|--------------------------------|-------------------------------------|-------|--------------|--|----------------|-----------------------------------|-------|
|                         |                                |                                     |       | General      | Vocational<br>and<br>teacher<br>training |                |                                   |       |
| 1                       | 2                              | 3                                   | 4     | 5            | 6  | 7              | 8                                 | 9     |
| Brazil                  | 10.1                           | 33.4                                | 19.5  | ..           | ..                                       | 20.0           | 17.0                              | 100.0 |
| France                  | 1.9                            | 48.3                                | 29.2  | 18.0         | 11.2(a)                                  | 8.3            | 12.3                              | 100.0 |
| Germany<br>(F.R.)       | 1.5                            | 48.1(b)                             | 35.8  | 23.1         | 12.7(a)                                  | 13.2           | 1.4                               | 100.0 |
| Ghana                   | 13.2                           | 26.7                                | 33.1  | 18.7         | 14.4                                     | 17.2           | 9.8                               | 100.0 |
| Nigeria                 | 9.4                            | 53.8                                | 29.0  | 12.6         | 16.4                                     | 5.1            | 2.7                               | 100.0 |
| Pakistan                | 5.5                            | 42.9                                | 23.8  | 19.1         | 4.7                                      | 19.6           | 8.2                               | 100.0 |
| Turkey                  | ...                            | 61.3                                | 32.4  | 13.4         | 19.0                                     | 1.4            | 4.9                               | 100.0 |
| UK (England<br>& Wales) | 4.1                            | 27.1                                | 38.8  | 31.5         | 7.3(a)                                   | 14.1           | 15.9                              | 100.0 |
| USA                     | ...                            | 72.4(c)                             | ..(d) | ...          | ...                                      | 27.6           | ...                               | 100.0 |
| USSR                    | 0.5                            | 71.2(c)                             | ..(d) | ...          | ...                                      | 13.3           | 15.0                              | 100.0 |
| Yugos-<br>lavia (e)     | 4.5                            | 58.3                                | 19.3  | ...          | ...                                      | 16.1           | 1.8                               | 100.0 |

Source. Compiled by the Commission's Study Team from documents available in the UNESCO Secretariat, Paris.

(a) Excludes expenditure on teacher training.

(b) Includes expenditure on special education.

(c) Includes expenditure on second level of education.

(d) Included under pre-school and first level of education.

(e) 1960.

19.13 The Indian picture in this context can be seen in the statistics given in Table 19.7.



TABLE 19.7. GROWTH OF EDUCATIONAL EXPENDITURE IN INDIA ACCORDING TO OBJECTS (1881-1960)

(Rs. in 000's)

|  | 1881-82                  | 1891-92                  | 1901-02                  | 1911-12                  | 1921-22                   | 1936-37                   | 1946-47                   | 1960-61                     |
|--|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|
| 1. Primary Schools . . . . .                                     | 7,087<br>(44.0)          | 9,614<br>(31.5)          | 11,876<br>(29.6)         | 20,726<br>(26.4)         | 50,908<br>(27.7)          | 81,260<br>(29.9)          | 184,853<br>(32.1)         | 734,461<br>(21.3)           |
| 2. Secondary Schools . . . . .                                   | 3,912<br>(24.3)          | 9,896<br>(32.4)          | 12,684<br>(31.6)         | 20,789<br>(26.5)         | 48,727<br>(26.5)          | 81,300<br>(29.9)          | 170,230<br>(29.5)         | 1,118,336<br>(32.5)         |
| 3. Vocational and Special Schools (including training) . . . . . | 453<br>(2.8)             | 1,711<br>(5.6)           | 2,280<br>(5.7)           | 5,374<br>(6.8)           | 13,701<br>(7.5)           | 18,595<br>(6.8)           | 34,657<br>(6.0)           | 146,088<br>(4.3)            |
| 4. Boards of Intermediate and Secondary Education . . . . .      | ..                       | ..                       | ..                       | ..                       | ..                        | 324<br>(0.1)              | 974<br>(0.2)              | 24,133<br>(0.7)             |
| <b>TOTAL (SCHOOLS)</b> . . . . .                                 | <b>11,452</b><br>(71.1)  | <b>21,221</b><br>(69.5)  | <b>26,840</b><br>(66.9)  | <b>46,889</b><br>(59.7)  | <b>113,336</b><br>(61.7)  | <b>181,479</b><br>(66.7)  | <b>390,714</b><br>(67.8)  | <b>2,023,018</b><br>(58.8)  |
| 5. Universities . . . . .  | 163<br>(1.0)             | 473<br>(1.6)             | 772<br>(1.9)             | 1,588<br>(2.0)           | 7,341<br>(4.0)            | 13,208<br>(4.9)           | 22,977<br>(4.0)           | 141,388<br>(4.1)            |
| 6. Arts and Science Colleges . . . . .                           | 1,332<br>(8.3)           | 2,044<br>(6.7)           | 2,601<br>(6.5)           | 4,799<br>(6.1)           | 11,042<br>(6.0)           | 16,662<br>(6.1)           | 43,915<br>(7.6)           | 236,139<br>(6.9)            |
| 7. Professional and Special Colleges . . . . .                   | ..                       | 829<br>(2.7)             | 1,197<br>(3.0)           | 2,253<br>(2.9)           | 5,978<br>(3.2)            | 8,138<br>(3.0)            | 18,659<br>(3.2)           | 167,166<br>(4.9)            |
| <b>TOTAL (UNIVERSITIES)</b> . . . . .                            | <b>1,495</b><br>(9.3)    | <b>3,346</b><br>(11.0)   | <b>4,570</b><br>(11.4)   | <b>8,640</b><br>(11.0)   | <b>24,361</b><br>(13.2)   | <b>38,008</b><br>(14.0)   | <b>85,551</b><br>(14.8)   | <b>544,693</b><br>(15.9)    |
| 8. Direction & Inspection . . . . .                              | 1,628<br>(10.1)          | 2,250<br>(7.4)           | 2,545<br>(6.3)           | 4,775<br>(6.1)           | 9,335<br>(5.1)            | 11,407<br>(4.2)           | 18,238<br>(3.2)           | 70,123<br>(2.0)             |
| 9. Buildings . . . . .   | 838<br>(5.2)             | 2,182<br>(7.1)           | 2,573<br>(6.4)           | 9,730<br>(12.3)          | 19,761<br>(10.8)          | 18,197<br>(6.7)           | 28,453<br>(4.9)           | 428,158<br>(12.4)           |
| 10. Scholarships . . . . .                                       | 399<br>(2.5)             | 727<br>(2.4)             | 912<br>(2.3)             | 1,340<br>(1.7)           | 3,176<br>(1.7)            | (a)                       | (a)                       | 200,222<br>(5.8)            |
| 11. Miscellaneous . . . . .                                      | 298<br>(1.8)             | 794<br>(2.6)             | 2,681<br>(6.7)           | 7,219<br>(9.2)           | 13,784<br>(7.5)           | 22,766<br>(8.4)           | 53,657<br>(9.3)           | 171,711<br>(5.1)            |
| <b>TOTAL (INDIRECT)</b> . . . . .                                | <b>3,163</b><br>(19.6)   | <b>5,953</b><br>(19.5)   | <b>8,711</b><br>(21.7)   | <b>23,064</b><br>(29.3)  | <b>46,056</b><br>(25.1)   | <b>52,370</b><br>(19.3)   | <b>100,348</b><br>(17.4)  | <b>870,214</b><br>(25.3)    |
| <b>GRAND TOTAL</b> . . . . .                                     | <b>16,110</b><br>(100.0) | <b>30,520</b><br>(100.0) | <b>40,121</b><br>(100.0) | <b>78,593</b><br>(100.0) | <b>183,753</b><br>(100.0) | <b>271,857</b><br>(100.0) | <b>576,613</b><br>(100.0) | <b>3,443,801</b><br>(100.0) |

(a) Included under Miscellaneous.  
 (b) Includes expenditure on pre-primary schools also.  
 NOTE. The figures in parentheses indicate the percentage to total expenditure.

It will be seen that before Independence the position remained more or less stationary in India for a period of about sixty years—the direct expenditure on school education decreasing only from 71.1 per cent in 1881-82 to 67.8 per cent in 1946-47 and that on higher education rising only from 9.3 per cent to 14.8 per cent during the same period. The position, however, changed radically with the attainment of independence. Steps

began to be taken for industrialization and hence greater expenditure was incurred on higher education, science and scientific research, technical and technological education, etc. By 1965-66, therefore, expenditure on higher education increased considerably. As will be seen from the data given in paragraph 19.09 earlier, the present position is that about one-third of the total expenditure is devoted to the first level of education; another one-third is devoted to the second level and to the indirect expenditure-on school education; and the remaining one- third is devoted to higher education.

### **SOURCES OF EDUCATIONAL EXPENDITURE (1950-65)**

19.14 We shall now proceed to examine the sources of educational expenditure during the first three plans. Due to various historical reasons, a multi-source finance system has grown in the country and education is now financed by the Central Government, State Governments and local authorities, and through fees and 'other' sources which include endowments, donations and other, voluntary contributions from the public. This has helped to raise more resources in the aggregate than would otherwise have been possible and has also shown a certain resilience in times of difficulties by setting off, to some extent, the shortfalls in one source by increase in others. Table 19.8 shows how the contribution of each source has increased during the first three plans.

It will be seen that the largest increase has taken place in the expenditure from government funds (555 per cent or an average annual growth of 13.3 per cent) this is only to be expected-and they now contribute 71.2 per cent of the total expenditure as against 57.1 per cent in 1950-51. Consequently, the contribution of all other sources has proportionately declined, although it has increased in absolute terms. The next important source is fees whose contribution has in- creased by 294 per cent (or 9.6 per cent per year); it now accounts for 15.3 per cent of the total educational expenditure. Then come other sources whose contribution has increased by 225 per cent (or 8.1 per cent per year) and which now bear only 7.2 per cent of the total

TABLE 19.8. EDUCATIONAL EXPENDITURE IN INDIA BY SOURCES  
(1950-51 to 1965-66)

| Source   | 1950-51 | 1955-56   | 1960-61   | 1965-66<br>(estimated) |
|--|---------|-----------|-----------|------------------------|
| <b>1. Government Funds</b>                               |         |           |           |                        |
| (i) Total expenditure<br>(Rs. in 000's)                  | 652,678 | 1,172,049 | 2,340,914 | 4,271,856              |
| (ii) Index of growth                                     | 100     | 179       | 359       | 655                    |
| (iii) Percentage of<br>total expenditure<br>on education | 57.1    | 61.8      | 68.0      | 71.2                   |
| <b>2. Local Authorities' Funds</b>                       |         |           |           |                        |
| (i) Total expenditure<br>(Rs. in 000's)                  | 124,987 | 163,548   | 224,914   | 378,031                |
| (ii) Index of growth                                     | 100     | 131       | 180       | 302                    |
| (iii) Percentage of<br>total expenditure on<br>education | 10.9    | 8.6       | 6.5       | 6.3                    |
| <b>3. Fees</b>   |         |           |           |                        |
| (i) Total expenditure<br>(Rs. in 000's)                  | 233,272 | 379,033   | 590,258   | 918,077                |
| (ii) Index of growth                                     | 100     | 162       | 253       | 394                    |
| (iii) Percentage of<br>total expenditure on<br>education | 20.4    | 20.0      | 17.1      | 15.3                   |
| <b>4. Other Sources</b>                                  |         |           |           |                        |
| (i) Total expenditure<br>(Rs. in 000's)                  | 132,885 | 181,980   | 287,715   | 432,036                |

|  |      |     |     |     |
|--|------|-----|-----|-----|
| (ii) Index of growth                               | 100  | 137 | 217 | 325 |
| (iii) Percentage of total expenditure on education | 11.6 | 9.6 | 8.4 | 7.2 |

#### 5. Average Annual Rate of Growth

|                               | First Plan | Second Plan | Third Plan | All Three Plans |
|-------------------------------|------------|-------------|------------|-----------------|
| (i) Government funds          | 12.4       | 14.8        | 12.8       | 13.3            |
| (ii) Local authorities' funds | 5.5        | 6.6         | 10.9       | 7.3             |
| (iii) Fees                    | 10.3       | 9.2         | 9.2        | 9.6             |
| (iv) Other sources            | 6.5        | 9.6         | 8.5        | 8.1             |

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Source. Ministry of Education, Form A.

expenditure. The local authorities whose resources are inelastic, particularly in rural areas, account for 6.3 per cent of the total expenditure only and they also show the lowest increase in contribution--202 per cent (or 7.3 per cent per year).

### **SOURCES OF EDUCATIONAL EXPENDITURE (1965-85)**

19.15 What would be the probable developments relating to sources of educational expenditure in the next 20 years ? It will be seen from the above that the responsibility for the financing of education at all stages is falling increasingly on government funds (Central and State). This trend will increase in the future. The total revenue from fees will be considerably reduced when, as we have recommended elsewhere,<sup>241</sup> education up to the end of the lower secondary stage is made tuition-free and a much larger provision of free-studentships is made in higher secondary and university education to meet the needs of the young persons from the under-privileged sections of society who are now coming into the universities and colleges. Similarly, the income from other sources would not rise in proportion to the increase in total educational expenditure. The local authorities also may not be able to provide more than a very small percentage of the total expenditure, even after they have made the best effort to raise their contribution. Taking an overall

<sup>241</sup>Chapter VI.

view of the situation, therefore, it appears that the funds of the Central and State Governments would have to bear about 90 per cent (or even more) of the total educational expenditure.

19.16 While it is true that most of the responsibility for the support of education should thus be squarely placed on governmental funds, a total centralization of all financial responsibility for education would also not be desirable, because it deprives the agencies at the school and local levels of initiative in the matter. Even though the resources thus raised may not be large, the provision of administrative arrangements under which such initiative can exist and is even encouraged is of very great educational significance. It will also stimulate parental and local interest in education and help to raise standards. We, therefore, recommend that attempts should continue to be made to raise as much contribution as possible from local communities, voluntary organizations and local authorities to support educational development.

**19.17 Contribution of Local Communities.** We have recommended earlier that the local communities should be closely associated with all government and local authority schools and that a school fund should be established in every school to meet the whole or part of the non-teacher costs.<sup>242</sup> We have further recommended that as part of the organization of a nation-wide programme of school improvement, the assistance of the local communities should be fully harnessed for improving the physical facilities in schools on the lines of the school improvement conference organized in Madras State.<sup>243</sup> in the case of private schools, we have suggested that the management should be able to raise a fair proportion of all the nonrecurring costs and in addition, a prescribed percentage of recurring costs.<sup>244</sup> Apart from their principal advantages of stimulating local interest in education, these contributions from the local communities and the public will also help to some extent in financing education.

**19.18 Contributions of Local Authorities.** The local authorities municipalities and zila parishads--will be able to make a fair contribution in support of educational development. In our opinion, it would be possible to maximize these contributions if a suitable system of grant-in-aid is adopted. The broad features of such a system are indicated in Supplemental Note I given at the end of this chapter.

**19.19 Contributions of Voluntary Organizations.** The voluntary organizations conducting educational institutions are also making a contribution to total educational expenditure. This can be stimulated and utilized for the purpose of development through appropriate policies of grant-in-aid. We have discussed these issues separately for school and higher education elsewhere.<sup>245</sup>

**19.20 Centre-State Relationship in the Financing of Education.** Between them, the Centre and the State Governments now contribute about 71 per cent of the total educational expenditure; and as stated above, this will rise to 90 per cent by 1985-86. The problem of

<sup>242</sup>Chapter X. <sup>243</sup>Chapter X. <sup>244</sup>Chapter X. <sup>245</sup>Chapters X and XIII.

Centre-State relationship in the financing of education is thus of great importance. We have discussed it, in the appropriate contexts, in the earlier chapters of the Report. A brief reference to it has also been made in Supplemental Note I given at the end of this chapter.

### TOTAL EDUCATIONAL EXPENDITURE (1965-85)

9.21 We now come to the more difficult part of our task, namely, to estimate the magnitude of the resources likely to be available for educational development during the next 20 years, and the best manner of their allocation to different sectors or stages of education.

**19.22 Estimate of Resources likely to be Available for Education during the Next Twenty Years.** In comparison with the last 15 years, the programme of educational development to be undertaken during the next two decades will be greater in magnitude and hence the total educational expenditure will have to increase much more. This would be possible only if there is increase both in ability and effort. The rate of growth of the economy has to be speeded up during the next two decades and this should be combined with a programme of population control. Also, the effort to increase allocations to education should be intensified. As stated earlier, it is difficult to be precise about these matters. We should, however, broadly work towards increasing the educational expenditure per capita, in a period of 20 years, to between 4 and 5 times the present level of Rs. 12 (at constant prices). This could be reached by a variety of combinations of different assumptions about the three variables involved, namely, economic growth (varying from 5 per cent to 7 per cent per annum), population growth (varying from 1.5 per cent to 2.5 per cent per annum), and the proportion of national income devoted to educational expenditure (varying from 4 per cent to 6 per cent). What we have in view, however, are developments on the following lines:

TABLE 19.9. TOTAL EDUCATIONAL EXPENDITURE (1965-85)

|  | 1965-66 | 1970-71 | 1975-76 | 1980-81 | 1985-86 |
|--|---------|---------|---------|---------|---------|
| 1. National income at 1965-66 prices increase assumed at 6 percent per annum (Rs. in millions) | 210,000 | 281,000 | 376,000 | 503,000 | 673,000 |
| 2. Index of growth   | 100     | 134     | 179     | 240     | 320     |
| 3. Population estimates (medium projection in millions)  | 495     | 560     | 630     | 695     | 748     |
| 4. Index of growth   | 100     | 113     | 127     | 140     | 151     |

|  |       |       |        |        |        |
|--|-------|-------|--------|--------|--------|
| 5. National income per bead of population (Rs.)  | 424   | 502   | 597    | 724    | 900    |
| 6. Index of growth   | 100   | 118   | 141    | 171    | 212    |
| 7. Total educational expenditure (Rs. in millions) (increase assumed at 10 per cent per annum) | 6,000 | 9,663 | 15,562 | 25,063 | 40,364 |
| 8. Index of growth   | 100   | 161   | 259    | 418    | 673    |
| 9. Percentage of total educational expenditure to national income                              | 2.9   | 3.4   | 4.1    | 5.0    | 6.0    |
| 10. Index of growth  | 100   | 117   | 141    | 172    | 207    |
| 11. Educational expenditure per capita (Rs.)   | 12.1  | 17.3  | 24.7   | 36.1   | 4.0    |
| 12. Index of growth  | 100   | 143   | 204    | 298    | 446    |

19.23 It will be seen that we have assumed a middle position with regard to the growth of national income (at 6 per cent per year as between the two other estimates of 5 and 7 per cent per year). Our assumption regarding the growth of population is also a medium estimate (2.1 per cent per year between 1966 and 1985 as against the two other estimates of 1.5 and 2.5 per cent per year). With regard to the proportion of national income devoted to education, we have assumed the highest rate of 6 per cent (out of the three possible assumptions of 4, 5 and 6 per cent) because we should accord the highest priority to education and allocate the largest proportion of GNP to it. We thus get a medium estimate of Rs. 54 per head of population by 1985-86. In this connection, chart on page 875 may also be seen.

It should, however, be noted that these assumptions cover a wide range of per capita costs:

(1) If national income grew at 5 per cent per year, population at 2.5 per cent per year, and 4 per cent of national income were allocated to education, the expenditure on education in 1985-86 would be only Rs. 27.5 per capita.

(2) If national income grew at 7 per cent per year, population at 1.5 per cent per year and 6 per cent of the national income were allocated to education, the expenditure on education in 1985-86 would be as high as Rs. 75.1 per capita.

The figure of 6 per cent of GNP invested in education by 1986 may seem to be an ambitious target. We do not quite hold this view. It is only in recent years that nations, realizing the deep and symbiotic link between education and national prosperity, have been increasing rapidly their investments in education and this trend is likely to continue. At the beginning of this century even 'advanced' countries such as the USA spent no more than a small fraction of their GNP on education. By 1986, it is likely that a figure of 10 per Cent of GNP invested in education will become commonplace in most countries. If total and comprehensive disarmament is achieved by then, as we all hope it will be, the figure for the developing countries may even exceed 10 per cent; and it is only through some such action that the dismal and dangerous gap between the poor and rich countries can be reduced to tolerable dimensions.

19.24 It has been suggested that in early stages of educational development the rate of growth of educational expenditure ought to be rate of growth of 10 per cent for educational expenditure relative to the assumed rate of growth of 6 per cent in national income. It should thus be possible to implement the schemes of educational expenditure at postulated levels even in the face of shortfalls in the rate of growth of national income. It may be added that the basis of such projections is the expected pattern of individual and collective consumption behaviour as incomes increase, combined with the educational effort needed for sustaining higher levels of economic activity.

19.25 What will be the pattern of allocation of resources to different sectors of education in future ? In our view, this pattern will change from decade to decade.

(1) In the first decade, an emphasis on a larger allocation to the school stage is needed. In the first place, it is necessary to upgrade the salaries of school teachers. The allocation needed for this purpose will be very large, partly because of the large numbers involved and partly because of the size of the increment which has to be given without delay. Secondly, we are proposing to transfer the PUC and the Intermediate classes from the university to the school stage. Thirdly, there is an urgent need to provide at least five years of effective education to all children in the country. Fourthly, it is equally necessary to vocationalize secondary education.

(2) In the second decade, seven years' of effective primary education will have to be provided. Secondly, emphasis will have to be placed on adding one year to the school stage and vocationalizing secondary education. But the additional allocation required for the purpose is not relatively so large as in the first decade and the emphasis will shift a little in favour of higher education.

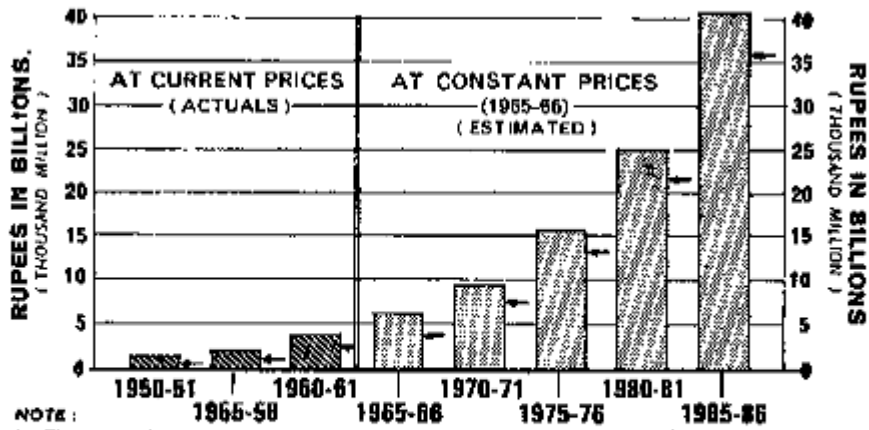
(3) In the third decade, the programmes at the secondary stage will be nearing completion and the emphasis will shift very largely to the development of higher education and research. As time passes, this trend is likely to continue. In this connection, chart on page 877 may also be seen.

19.26 A tentative estimate of the expenditure required for school and higher education in 1975-76 and 1985-86 has been attempted and will be found in the Supplemental Notes II



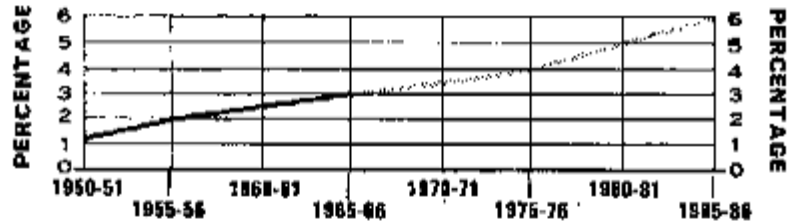
and III given at the end of this chapter. It will be seen therefrom that about 72 per cent of the total expenditure in 1975-76 will be allocated to school education and that higher education will get about 27 per cent instead of about 33 percent as at present. We would like to point out, however, that this reduction in the proportion of educational expenditure devoted to higher education is more apparent than real. A large part of the expenditure on higher secondary (PUC) stage which has been shown here under 'school' is at present classified as being under 'university'. If due allowance is made for this--this expenditure is of the order of 4 or 5 per cent of the total--it will be seen that the school gets only about two-thirds of the total expenditure as in the past. In the second decade, the

## Expenditure on Education, 1950-85



- NOTE:
1. The portion below the arrow ( ← ) represents Expenditure met from Government Funds and that above it from other sources.
  2. The dotted bars represent Estimated Expenditure at constant prices of 1965-66.

### EDUCATIONAL EXPENDITURE AS PERCENTAGE OF NATIONAL INCOME



### EDUCATIONAL EXPENDITURE PER CAPITA

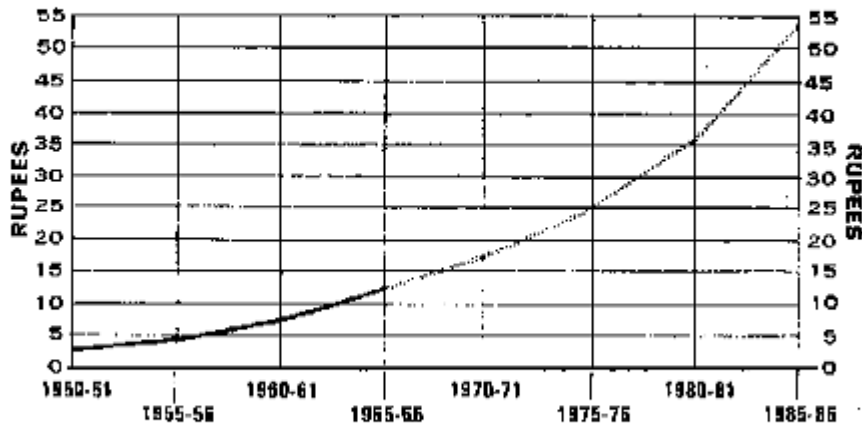


Fig. 29

expenditure of school education is reduced to 65.9 per cent or about two-thirds of the total. Consequently, higher education will receive a larger allocation.

19.27 It has been argued before us that, in view of the urgency to develop higher education, it may be desirable to go slow with primary education for some time and to invest more of the available resources in secondary and higher education. Some have also argued the other view that we should' develop primary education as rapidly as possible and at any cost. The Sargent Plan, for instance, allocated two-thirds of the total resources to primary education. These are extreme views. We realize the need for the development of higher education and for the allocation of more resources to it. But it would not be proper to cut down for this purpose the expenditure on primary education. As we have repeatedly stressed in the Report the provision of universal primary education is vital on grounds of social justice and to help the process of transformation of the national economy. Again, development of his her education and research is central to the entire developmental programme; and without an adequate provision for higher education there will be no adequate supply of competent teachers for primary and secondary education. What we want is a balance growth of education. There seems to be no alternative but to adopt the board pattern of allocation of resources suggested above.

### **EXPENDITURE PER STUDENT**

19.28 Pattern of Cost per Student in the First Three Plans. We shall now turn to a consideration of the expenditure per pupil at each level of education. This depends upon three factors: the average annual salary of a teacher (a); the pupil-teacher ratio (t); and the expenditure on all non-teacher costs which can be expressed as a percentage of the average salary of a teacher (r). Symbolically, it can be stated as follows:

$$\text{Cost per pupil} = a (+r)/t$$

where a = average annual salary of a teacher

r = ratio of non-teacher costs to teacher's salary

t = pupil-teacher ratio.

All these factors have undergone changes in each sector during the last fifteen years with the result that the overall cost per student (direct expenditure only) has increased from Rs. 37 per student in 1950-51 to Rs. 64 per student in 1965-66 (at current prices) or by 73 per cent. But if allowance is made for the rise in the cost of living (which is about 65 per cent), the rise in real terms becomes almost negligible. The detailed statistics in this regard are given in Tables 19.10 A and B.

### Expenditure on Education by Levels, 1950-85

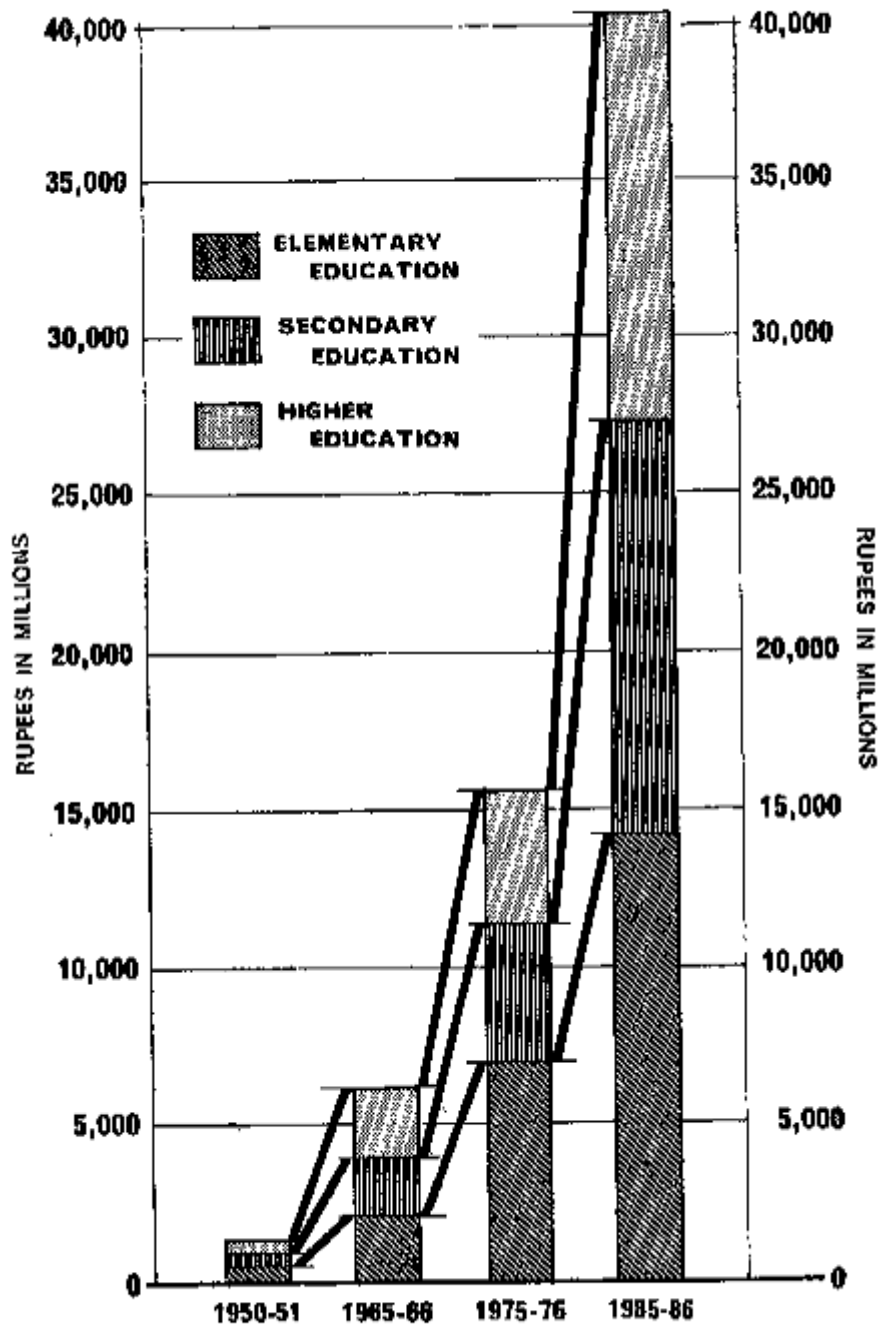


Fig. 30

19.29 The problem of the salaries of teachers has already been discussed in Chapter III and XVII. With regard to the other factors, some important conclusions arise from these data.

(1) The cost per pupil/student does not show appreciable increase except in professional colleges and vocational schools. Even here, if allowance is to be made for the rise in prices, there is actually a fall in expenditure in real terms.

(2) At the pre-primary stage, the cost per pupil has remained almost stationary. It implies that in real terms, the investment per student has gone down very greatly.

(3) At the lower primary stage, the cost per student has gone up by 50 per cent. But, at constant prices, this also implies a fall in real terms. The non-teacher costs per pupil have actually fallen, even at constant prices. That is why our primary schools are so dull and drab. In fact, in many primary schools, we give hardly anything except the teacher. The picture at the higher primary stage is similar.

TABLE 19.10A. AVERAGE ANNUAL COST PER PUPIL (1950-51)

| Type of institution              | Average annual salary per | Number of pupils per teacher | Percentage of non-teacher costs | Average annual cost per pupil |                          |       |
|----------------------------------|---------------------------|------------------------------|---------------------------------|-------------------------------|--------------------------|-------|
|                                  |                           |                              |                                 | Due to teacher costs          | Due to non-teacher costs | Total |
|                                  | Rs.                       |                              |                                 | Rs.                           | Rs.                      | Rs.   |
| Pre-Primary Schools              | 914                       | 25                           | 51.3                            | 37                            | 19                       | 55    |
| Lower Primary Schools            | 545                       | 34                           | 24.6                            | 16                            | 4                        | 20    |
| Higher Primary Schools           | 682                       | 24                           | 32.0                            | 28                            | 9                        | 37    |
| Secondary Schools                | 1,258                     | 25                           | 44.8                            | 50                            | 23                       | 73    |
| Schools for Vocational Education | 1,705                     | 16                           | 86.8                            | 106                           | 92                       | 197   |

|                                    |        |    |       |           |           |           |
|------------------------------------|--------|----|-------|-----------|-----------|-----------|
| Schools for Special Education      | 715    | 13 | 98.5  | 55        | 54        | 109       |
| Universities(Teaching Departments) | 3,759  | 10 | N.A.  | N.A.      | N.A.      | N.A.      |
| Colleges of Arts & Science         | 2,696  | 20 | 73.7  | 133       | 98        | 231       |
| Colleges of Professional Education | 13,948 | 11 | 118.1 | 357       | 422       | 779       |
| Colleges of Special Education      | 1,656  | 8  | 48.6  | 203       | 99        | 301       |
| <b>TOTAL-DIRECT EXPENDITURE</b>    |        |    |       | <b>25</b> | <b>12</b> | <b>37</b> |

N.B. Totals do not tally on account of rounding of figures. Source. Ministry of Education, Form A.

TABLE 19.10B. AVERAGE ANNUAL COST PER PUPIL (1965-66)

| Type of institution    | Average annual salary per | Number of pupils per teacher | Percentage of non-teacher costs | Average annual cost per pupil |                          |       |
|------------------------|---------------------------|------------------------------|---------------------------------|-------------------------------|--------------------------|-------|
|                        |                           |                              |                                 | Due to teacher costs          | Due to non-teacher costs | Total |
|                        | Rs.                       |                              |                                 | Rs.                           | Rs.                      | Rs.   |
| Pre-Primary Schools    | 1,000                     | 31                           | 56.3                            | 35                            | 20                       | 55    |
| Lower Primary Schools  | 1,046                     | 38                           | 11.1                            | 27                            | 3                        | 30    |
| Higher Primary Schools | 1,087                     | 31                           | 12.4                            | 40                            | 5                        | 45    |
| Secondary Schools      | 1,959                     | 25                           | 37.0                            | 78                            | 29                       | 107   |

|                                     |       |    |       |           |           |           |
|-------------------------------------|-------|----|-------|-----------|-----------|-----------|
| Schools for Vocational Education    | 2,887 | 15 | 100.0 | 208       | 208       | 417       |
| Schools for Special Education       | 991   | 12 | 66.7  | 81        | 54        | 135       |
| Universities (Teaching Departments) | 6,500 | 12 | N.A.  | N.A.      | N.A.      | N.A.      |
| Colleges of Arts & Science          | 4,000 | 20 | 63.8  | 200       | 128       | 328       |
| Colleges for Professional Education | 6,410 | 11 | 100.0 | 583       | 583       | 1,167     |
| Colleges for Special Education      | 2,918 | 12 | 42.9  | 245       | 105       | 350       |
| <b>TOTAL-DIRECT EXPENDITURE</b>     |       |    |       | <b>46</b> | <b>18</b> | <b>64</b> |

N.B. Totals do not tally on account of rounding of figures. Source. Ministry of Education, Form A.

(4) Expenditure per student in colleges of arts and science shows some increase in current prices, but a fall in real terms.

**19.30 The Pattern of Cost Per Student during the Next Twenty Years.** A tentative estimate of expenditure in the different sectors of school education during the next twenty years is discussed in Supplemental Note II at the end of the chapter. A similar but still more tentative estimate for higher education has been given in Supplemental Note III at the end of the chapter. We shall now briefly discuss their implications and limitations.

**19.31 School Education.** It is comparatively easy to estimate the expenditure on school education because (1) the teacher costs form a proportionately larger part of the total expenditure, (2) the non-teacher costs can be more accurately estimated, (3) there is no variety of courses to be provided at the primary stage, and (4) even at the secondary stage, the variety of courses to be provided in vocational education is comparatively limited and does not show wide variations of costs. These estimates, therefore, are more reliable and better guides to the formulation of educational policies.

19.32 Table 19.11 gives the total estimated expenditure on school education and Table 19.12 gives its implications in terms of teachers' salaries, pupil-teacher ratios, levels of non-teacher expenditure, and maintenance of quality institutions.

TABLE 19.11. EXPENDITURE ON SCHOOL EDUCATION (1975-76 and 1985-86)

|                                | Total Expenditure<br>(Rs. in 000's) |            | Percentage of total<br>expenditure |         |
|--------------------------------|-------------------------------------|------------|------------------------------------|---------|
|                                | 1975-76                             | 1985-86    | 1975-76                            | 1985-86 |
| <b>1. Recurring (Direct)</b>   |                                     |            |                                    |         |
| Pre-primary                    | 236,956                             | 488,531    | 1.5                                | 1.2     |
| Lower Primary                  | 3,749,220                           | 6,129,616  | 24.1                               | 15.2    |
| Higher Primary                 | 2,451,567                           | 5,140,287  | 15.8                               | 12.7    |
| TOTAL                          | 6,437,743                           | 11,758,434 | 41.4                               | 29.1    |
| Lower Secondary:               |                                     |            |                                    |         |
| General                        | 2,072,510                           | 4,490,088  | 13.3                               | 11.1    |
| Vocational                     | 359,800                             | 2,582,550  | 2.3                                | 6.4     |
| TOTAL                          | 2,432,310                           | 7,072,638  | 15.6                               | 17.5    |
| Higher Secondary:              |                                     |            |                                    |         |
| General                        | 488,436                             | 1,281,299  | 3.1                                | 3.2     |
| Vocational                     | 823,900                             | 2,362,250  | 5.3                                | 5.8     |
| TOTAL                          | 1,312,336                           | 3,643,549  | 8.4                                | 9.9     |
| TOTAL RECURRING<br>(Direct)    | 10,182,389                          | 22,474,621 | 65.4                               | 55.7    |
| <b>2. Recurring (Indirect)</b> |                                     |            |                                    |         |
| Direction and<br>Inspection    | 389,050                             | 1,614,560  | 2.5                                | 4.0     |
| Scholarships                   | 301,680                             | 1,490,240  | 1.9                                | 3.7     |



|   |            |            |      |      |
|---|------------|------------|------|------|
| TOTAL                                     | 690,730    | 3,104,800  | 4.4  | 7.7  |
| <b>3. Recurring (Direct and Indirect)</b> | 10,873,119 | 25,579,421 | 69.9 | 63.4 |
| <b>4. Capital Buildings and Equipment</b> | 389,050    | 1,008,890  | 2.5  | 2.5  |
| TOTAL SCHOOL EDUCATION                    | 11,262,169 | 26,588,311 | 72.4 | 65.9 |

N.B. Totals do not tally due to rounding of figures. For details, see Supplemental Note II at the end of the chapter.

TABLE 19.12. AVERAGE ANNUAL COST PER PUPIL (1950-51 to 1985-86)

| Year                           | Average annual salary per teacher | Number of pupils per teacher | Percentage of non-teacher costs to teacher costs | Average annual cost  |                          | Total |
|--------------------------------|-----------------------------------|------------------------------|--|----------------------|--------------------------|-------|
|                                | Rs.                               |                              |  | Due to teacher costs | Due to non-teacher costs | Rs.   |
| <b>Pre-primary Education</b>   |                                   |                              |  |                      |                          |       |
| 1950-51                        | 914                               | 25                           | 51.3   | 37                   | 19                       | 55    |
| 1965-66                        | 1,000                             | 31                           | 56.3   | 35                   | 20                       | 55    |
| 1975-76                        | 1,800                             | 40                           | 50.0   | 50                   | 25                       | 74    |
| 1985-86                        | 2,500                             | 40                           | 50.0   | 69                   | 34                       | 103   |
| <b>Lower Primary Education</b> |                                   |                              |  |                      |                          |       |
| 1950-51                        | 545                               | 34                           | 24.6   | 16                   | 4                        | 20    |
| 1965-66                        | 1,046                             | 38                           | 11.1   | 27                   | 3                        | 30    |
| 1975-76                        | 1,800                             | 50                           | 20.2   | 43                   | 9                        | 52    |

|         |       |    |      |    |    |    |
|---------|-------|----|------|----|----|----|
| 1985-86 | 2,500 | 45 | 19.6 | 67 | 13 | 80 |
|---------|-------|----|------|----|----|----|

**Higher Primary Education**

|         |       |    |      |    |    |     |
|---------|-------|----|------|----|----|-----|
| 1950-51 | 682   | 24 | 32.0 | 28 | 9  | 37  |
| 1965-66 | 1,087 | 31 | 12.4 | 40 | 5  | 45  |
| 1975-76 | 2,100 | 35 | 20.0 | 73 | 14 | 87  |
| 1985-86 | 2,875 | 35 | 20.0 | 99 | 20 | 119 |

**Lower Secondary Education(General)**

|          |       |    |      |     |    |     |
|----------|-------|----|------|-----|----|-----|
| 1950-51* | 1,258 | 25 | 44.8 | 50  | 23 | 73  |
| 1965-66* | 1,959 | 25 | 37.0 | 78  | 29 | 107 |
| 1975-76  | 3,150 | 25 | 33.3 | 152 | 51 | 203 |
| 1985-86  | 4,150 | 25 | 33.3 | 201 | 67 | 268 |

**Lower Secondary Education(Vocational)**

|           |       |    |       |     |     |     |
|-----------|-------|----|-------|-----|-----|-----|
| 1950-51** | 1,705 | 16 | 86.8  | 106 | 92  | 197 |
| 1965-66** | 2,887 | 15 | 100.0 | 208 | 208 | 417 |
| 1975-76   | ..    | .. | ..    | ..  | ..  | 500 |
| 1985-86   | ..    | .. | ..    | ..  | ..  | 600 |

**Higher Secondary Education(General)**

|         |       |    |      |     |     |     |
|---------|-------|----|------|-----|-----|-----|
| 1975-76 | 4,500 | 20 | 33.3 | 272 | 91  | 363 |
| 1985-86 | 5,500 | 20 | 33.3 | 333 | 111 | 444 |

### Higher Secondary Education (Vocational)

|         |   |    |     |     |     |     |     |
|---------|---|----|-----|-----|-----|-----|-----|
| 1975-76 | . | .. | ... | ... | ... | ..  | 700 |
| 1985-86 | . | .. | ... | ... | ... | ... | 800 |

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\*High/Higher Secondary Schools.

\*\*A11 types of vocational and technical schools.

Note (i) The costs for the years 1950-51 and 1965-66 are at current prices and for those 1975-76 and 1985-86 are at constant prices of 1965-66.

(ii) For details, see Supplemental Note II at the end of the chapter.

(iii) Totals do not tally on account of rounding of figures.

19.33 We would specially invite attention to the following implications of these estimates:

(1) *Total Expenditure on School Education.* The total expenditure on school education is expected to increase from Rs. 4,046 million (or 67.4 per cent of the total expenditure) in 1965-66 to Rs. 11,262 million (or 72.4 per cent of the total expenditure) in 1975-76, and Rs. 26,588 million (or 65.9 per cent of the total expenditure) in 1985-86.

(2) *Capital Expenditure on School Education.* The bulk of this expenditure will be recurring. The capital expenditure on school education will increase from Rs. 133 million (or 2.2 per cent of the total expenditure) in 1965-66 to Rs. 389 million (or 2.5 per cent of the total expenditure) in 1975-76, and to Rs. 1,009 million (or 2.5 per cent of the total expenditure) in 1985-86.

(3) *Pre-primary Education.* The average annual salary of teachers is expected to rise from Rs. 1,000 in 1965-66 to Rs. 1,800 in 1975-76 and Rs. 2,500 in 1985-86. The pupil-teacher ratio is proposed to be raised from 31 in 1965-66 to 40. The average annual cost per student which was Rs. 55 in 1965-66, would be raised to Rs. 74 in 1975-76, and Rs. 103 in 1985-86. It will be noticed that the cost per student is higher at the pre-primary stage than at the primary stage because of the need to provide meals and other health services.

(4) *Lower Primary Education.* The average annual cost per student was only Rs. 20 in 1950-51 and it rose to Rs. 30 in 1965-66 (at current prices). If allowance is to be made for increase in prices, there would be an actual fall. What is now proposed is to raise this cost substantially, at constant prices, to Rs. 52 in 1975-76 and to Rs. 80 in 1985-86.

It should be remembered that, at this level of expenditure, all that is possible is to provide free books to all children and the necessary contingencies to primary schools. No provision has been made in these estimates for school meals, school uniforms or health services. The average annual salaries of teachers will rise from Rs. 1,046 in 1965-66 to Rs. 1,800 in 1975-76 and Rs. 2,500 in 1985-86. This, we regard, is the minimum essential. The pupil-teacher ratio is proposed to be raised from 38 in 1965-66 to 50 in 1975-76 by the adoption of the three-hour session system. This is inescapable if a living wage is to be given to the primary teachers. If smaller classes are considered desirable, either additional funds will have to be found or the rate of expansion will have to be deliberately slowed down.

It may be incidentally pointed out that the average class-size in compulsory primary education bears a definite proportion to the effective birth-rate (i.e., children per thousand of population entering the age-group 5-6 when admission to primary school begins). In other words, class-size (on the assumption that the salary of teacher is 3 to 4 times the per capita GNP) in compulsory education generally lies between 1.5 and 2.0 times the effective birth-rate. When the birth rate in India falls down to somewhere between 15 and 20, it will be easily possible to reduce the class-size to somewhere between 30 and 35. But smaller class-sizes at the present level of birth-rate will be costly and beyond the economic capacity of the country.

It should also be emphasized that we have provided 10 per cent of the primary schools at optimum levels of quality, i.e. at about twice the cost per pupil than in the average school. It will be possible to maintain these schools at a level of efficiency of the next higher stage, i.e. higher primary education and to provide them with trained graduates as headmasters and larger grants for non-teacher expenditure.

(5) *Higher Primary Education.* The general picture at this stage is similar to that at the lower primary stage.

We expect the headmasters of these schools to be trained graduates (it has been assumed that there would be one trained graduate to three other teachers) and hence the average annual salary of a teacher is a little higher than that at the lower primary stage. The pupil-teacher ratio is proposed to be raised from 31 to 35 and maintained at that level.

The cost per pupil will rise from Rs. 45 to Rs. 87 by 1975-76 and still further to Rs. 119 by 1985-86 (at 1965-66 prices).

As at the primary stage, provision has only been made for free supply of books and contingencies and there is no provision for school meals, uniforms or health services.

It has been assumed that 20 per cent of the total enrolment would be in part-time courses.

(6) *Lower Secondary Education.* The average annual salary of teachers which stood at Rs. 1,959 in 1965-66 is proposed to be increased to Rs. 3,150 by 1975-76 and Rs. 4,150 by 1985-86. The pupil-teacher ratio remains unchanged at 25. The cost per pupil which

rose from Rs. 73 in 1950-51 to Rs. 107 in 1965-66 (at current prices) is expected to rise, at constant prices, to Rs. 203 in 1975-76 and to Rs. 268 in 1985-86.

(7) *Higher Secondary Education.* At this stage, the average annual salary of teachers will be Rs. 4,500 in 1975-76 and Rs. 5,500 in 1985-86. The pupil-teacher ratio has been assumed at 20. The cost per student is expected to rise to Rs. 363 in 1975-76 and to Rs. 444 in 1985-86.

(8) *Vocational Education.* Provision has been made for vocational courses both at the lower secondary and higher secondary stages as recommended in the relevant chapters of the Report. The cost per pupil has been assumed on an ad hoc basis. To be accurate, it will be necessary to cost each vocational course separately. But the necessary data for this were not available to us.

(9) *Quality Institutions.* As at the lower primary stage, provision has been made to maintain about 10 per cent of the institutions at each stage at optimum levels of efficiency. In other words, it is assumed that in 10 per cent of the institutions at each stage, the cost per pupil will be about double that in the ordinary schools at that stage.

The levels of expenditure per pupil given above certainly mark a great improvement over the existing situation. But they are, by no means, what can be wished for. It is however evident that these are probably the highest levels of expenditure which we might be able to afford.

TABLE 19-13. EXPENDITURE ON HIGHER EDUCATION (1975-76 to 1985-86)

| Type of education                  | Total Expenditure<br>(Rs. in 000's) |           | Percentage of total<br>expenditure |         |
|------------------------------------|-------------------------------------|-----------|------------------------------------|---------|
|                                    | 1975-76                             | 1985-86   | 1975-76                            | 1985-86 |
| 1. Recurring (Direct)              |                                     |           |                                    |         |
| Undergraduate Arts<br>and Commerce | 453,516                             | 974,963   | 2.9                                | 2.4     |
| Science and<br>Vocational          | 1,439,250                           | 3,264,000 | 9.2                                | 8.1     |
| TOTAL                              | 1,892,766                           | 4,238,963 | 12.2                               | 10.5    |
| Postgraduate<br>Arts and Commerce  | 304,200                             | 1,106,400 | 1.9                                | 2.7     |
| Science and<br>Vocational          | 820,000                             | 2,937,000 | 5.3                                | 7.3     |

|   |           |            |      |      |
|---|-----------|------------|------|------|
| TOTAL                                       | 1,124,200 | 4,043,400  | 7.2  | 10.0 |
| Total Recurring<br>(Direct)                 | 3,016,966 | 8,282,363  | 19.4 | 20.5 |
| 2. Recurring (Indirect)                     |           |            |      |      |
| Scholarships                                | 628,200   | 2,416,200  | 4.0  | 6.0  |
| 3. Total Recurring<br>(Direct and Indirect) | 3,645,166 | 10,698,563 | 23.4 | 26.5 |
| 4. Capital<br>Buildings and<br>Equipment    | 576,855   | 2,673,486  | 3.7  | 6.6  |
| TOTAL(Higher<br>Education)                  | 4,222,021 | 13,372,049 | 27.1 | 33.1 |

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N.B. Totals do not tally due to rounding of figures. For details, see Supplemental Note III at the end of the chapter.

**19.34 Higher Education.** We must confess that in the case of higher education it is even more difficult to prepare reliable estimates and forecasts of costs. All the same, we have made a tentative exercise in costing the programme of higher education for 1975-76 and 1985-86 at the constant prices of 1965-66. The details, as stated earlier, will be found in Supplemental Note III at the end of this chapter. Its main conclusions are shown in Tables 19.13 and 19.14.

TABLE 19.14. AVERAGE ANNUAL COST PEP, PUPIL IN HIGHER EDUCATION  
(1950-51 to 1985-86)

| Type of institution               | Average annual salary per | Number of pupils per teacher | Percentage of non-teacher costs<br>teacher costs | Average annual cost per pupil |                          | Total |
|-----------------------------------|---------------------------|------------------------------|--|-------------------------------|--------------------------|-------|
|                                   |                           |                              |  | Due to teacher costs          | Due to non-teacher costs |       |
|                                   | Rs.                       |                              |  | Rs.                           | Rs.                      | Rs.   |
| <b>Undergraduate</b>              |                           |                              |  |                               |                          |       |
| <b>(a) Arts and Commerce</b>      |                           |                              |  |                               |                          |       |
| 1950-51*                          | 2,696                     | 20                           | 73.7   | 133                           | 98                       | 231   |
| 1965-66*                          | 4,000                     | 20                           | 63.8   | 200                           | 128                      | 328   |
| 1975-76                           | 6,000                     | 15                           | 66.7   | 440                           | 293                      | 733   |
| 1985-86                           | 7,500                     | 15                           | 66.7   | 550                           | 367                      | 917   |
| <b>(b) Science and Vocational</b> |                           |                              |  |                               |                          |       |
| 1950-51**                         | 3,948                     | 11                           | 118.1  | 357                           | 422                      | 779   |
| 1965-66**                         | 6,410                     | 11                           | 100.0  | 584                           | 583                      | 1,167 |
| 1975-76                           | ...                       | ..                           | ...  | ..                            | ..                       | 1,500 |
| 1985-86                           | ...                       | ..                           | ...  | ..                            | ..                       | 2,000 |
| <b>Postgraduate</b>               |                           |                              |  |                               |                          |       |
| <b>(a) Arts and Commerce</b>      |                           |                              |  |                               |                          |       |
| 1975-76                           | 10,000                    | 8                            | 118  | 1,375                         | 1,625                    | 3,000 |
| 1985-86                           | 12,000                    | 8                            | 118  | 1,650                         | 1,950                    | 3,600 |
| <b>(b) Science and Vocational</b> |                           |                              |  |                               |                          |       |

|         |     |    |    |     |     |       |
|---------|-----|----|----|-----|-----|-------|
| 1975-76 | ... | .. | .. | ... | ... | 5,000 |
| 1985-86 | ... | .. | .. | .   | ..  | 6,000 |

\* All types of colleges for arts and science (intermediate to postgraduate).

\*\* A11, types of vocational/professional colleges.

N.B. For details, see Supplemental Note III at the end of the chapter. Some actual costs per student in a few universities and colleges are given in Supplemental Note IV at the end of the chapter.

19.35 The following comments about Table 19.14 are in order. We have assumed that-

(1) at the undergraduate stage, the cost per student will be Rs. 733 for about 40 per cent of the enrolment (in arts and commerce courses) and Rs. 1,500 for 60 per cent of the enrolment (in quality institutions in courses in arts and commerce and in science and vocational courses) in 1975-76. For 1985-86 the corresponding figures would be Rs. 917 and Rs. 2,000, respectively. Even these costs will be possible in full-time education only if at least 30 per cent of the total enrolment is in courses of part-time and correspondence education.

(2) at the postgraduate stage, the cost per student will be Rs. 3,000 for about 40 per cent of the enrolment (in arts and commerce courses) and Rs. 5,000 for the remaining 60 per cent of the enrolment (in quality institutions in arts and commerce and in science and vocational courses) in 1975-76. The corresponding figures for 1985-86 would be Rs. 3,600 and Rs. 6,000, respectively. As at the undergraduate stage, these expenditures would be possible in full-time postgraduate education if at least 30 per cent of the enrolment is provided for in part-time and correspondence courses.

(3) The funds available for capital expenditure are far from adequate, especially in the next few years. Ordinarily, about 20 to 25 per cent of the total expenditure on higher education should be available for buildings and major equipment. Instead of this, only 15.8 per cent of the total expenditure on higher education will be available for capital programmes in 1975-76. Fortunately, the position improves by about 1985-86 when the proportion of capital expenditure rises to about 25 per cent.

19.36 From the data we have been able to collect regarding cost per student in institutions of higher education which are known to maintain good standards, it appears that this order of expenditure per student will be far from adequate. At the undergraduate stage we broadly require an expenditure of the order of Rs. 1,000 per student; and if 10 per cent of the institutions are to be maintained at optimum levels of quality, i.e. at about ten times the cost per pupil, the average cost per student at the undergraduate stage will have to be about Rs. 2,000. The capital cost at this stage will be about Rs. 5,000 per student. At the postgraduate stage, a capital expenditure of the order of about Rs. 25,000 to Rs. 30,000



per student is needed and the recurring cost will have to be as high as Rs. 6,000 to Rs. 7,000 per student. As at the undergraduate stage, this expenditure also would be doubled if 10 per cent of the institutions are to be maintained at optimum levels of quality i.e., at about ten times the cost per student. It is thus obvious that if an earnest attempt is to be made to maintain adequate levels of quality in higher education and to raise at least a few institutions to international standards, we will have to find large additional resources. If that is not possible, we shall have to come to grips with difficult problems of the following type:

(1) Would it be possible to reduce the total enrolment in higher education ? This will involve the consideration of a number of problems such as relating the output of educational institutions to forecasts of manpower needs; improving organization and administration in the public and private sectors to ensure that every educated person is fully and properly utilized; reducing unemployment among the educated; increasing the participation rates among the educated persons; revising the present policies which are based on 'over-education', e.g., educating an engineer etc.

(2) Would it be possible to reduce the number of places to be provided in full-time education so that a larger expenditure per place could be incurred ? This will involve a serious attempt to expand part-time and correspondence education and to provide these facilities to about 50 per cent of the total enrolment as is done at present, for instance, in the USSR.

(3) Would it be possible to economize the expenditure in terms of physical and financial investment without affecting standards this will involve problems of intensive utilization of existing institutions; manufacture of equipment in the country itself, etc.

These and other problems of this type are as important as they are difficult. At the moment we run away from them by diluting standards and maintaining the expenditure per student at low levels--a device which provides an easy escape valve. In any attempt to raise standards and the expenditure per pupil, these problems will have to be squarely faced and resolutely tackled.

**19.37 Adult Education.** Our proposals for the development of adult education (including liquidation of adult illiteracy) are given in Chapter XVII. For these programmes, we propose an increasing provision which will rise to about Rs. 78 million a year (or 0.5 per cent of the total expenditure) in 1975-76 and Rs. 404 million a year (or 1.0 per cent of the total expenditure) in 1985-86.

**19.38 Total Expenditure.** Table 19.15 gives the total estimated expenditure-recurring as well as capital-on all stages and sector of education for 1975-76 and 1985-86.

TABLE 19.15. EDUCATIONAL EXPENDITURE BY OBJECTS IN INDIA (1975-76 and 1985-86)

| Object                         | Total Expenditure<br>(Rs. in 000's) |            | Percentage of total<br>expenditure |         |
|--------------------------------|-------------------------------------|------------|------------------------------------|---------|
|                                | 1975-76                             | 1985-86    | 1975-76                            | 1985-86 |
| <b>Recurring</b>               |                                     |            |                                    |         |
| Pre-primary                    | 236,956                             | 488,531    | 1.5                                | 1.2     |
| Lower Primary                  | 3,749,220                           | 6,129,616  | 24.1                               | 15.2    |
| Higher Primary                 | 2,451,567                           | 5,140,287  | 15.8                               | 12.7    |
| Lower Secondary                | 2,432,310                           | 7,072,638  | 15.6                               | 17.5    |
| Higher Secondary               | 1,312,336                           | 3,643,549  | 8.4                                | 9.0     |
| Direction and<br>Inspection    | 389,050                             | 1,614,560  | 2.5                                | 4.0     |
| Scholarships                   | 301,680                             | 1,490,240  | 1.9                                | 3.7     |
| TOTAL (SCHOOL)                 | 10,873,119                          | 25,579,421 | 69.9                               | 63.4    |
| Undergraduate                  | 1,892,766                           | 4,238,963  | 12.2                               | 10.5    |
| Postgraduate                   | 1,124,200                           | 4,043,400  | 7.2                                | 10.0    |
| Scholarships                   | 628,200                             | 2,416,200  | 4.0                                | 6.0     |
| TOTAL<br>(HIGHER<br>EDUCATION) | 3,645,166                           | 10,698,563 | 23.4                               | 26.5    |
| Adult Education                | 77,810                              | 403,640    | 0.5                                | 1.0     |
| TOTAL<br>(RECURRING)           | 14,596,095                          | 36,681,624 | 93.8                               | 90.9    |

## Capital

|                  |            |            |       |       |
|------------------|------------|------------|-------|-------|
| School education | 389,050    | 1,008,890  | 2.5   | 2.5   |
| Higher education | 576,855    | 2,673,486  | 3.7   | 6.6   |
| TOTAL (CAPITAL)  | 965,905    | 3,682,376  | 6.2   | 9.1   |
| GRAND TOTAL      | 15,562,000 | 40,364,000 | 100.0 | 100.0 |

Note. Totals do not tally due to rounding of figures.

### SOME GENERAL OBSERVATIONS

19.39 Whatever the assumptions one might make regarding the growth of national income or the proportion of GNP to be allocated to education, it is evident that, in the foreseeable future, it will not be possible to provide monetary resources for education which can compare with what is being done in the industrialized countries. We have assumed that the total educational expenditure would rise, at constant prices, from about Rs. 12 per capita in 1965-66 to about Rs. 54 per capita in 1985-86. But even this can bear no comparison to the level of educational expenditure already reached in some industrialized countries. For instance, this expenditure is about Rs. 244 (11,700 yen) in Japan; Rs. 295 (193.63 francs) in France; Rs. 378 (45.35 roubles) in the USSR; Rs. 515 (£24.55) in the UK and Rs. 1,175 (156.73 dollars) in the USA.<sup>246</sup> The gulf between these levels of educational expenditure and ours is and will continue to be so wide that we cannot hope to solve our problems by the mere adoption of the techniques of the industrialized countries.

19.40 In a situation of this type, we can hope to obtain optimum results only if we adopt action on two lines. The first is that we should strive to allocate the largest proportion of GNP possible to educational development. Since additional resources are generated largely through the process of economic growth, the fact that education tends to augment the flow of national product, though with some time-lag, is -of crucial importance. It follows, therefore, that in the long run education to some extent is self-financing because the increased incomes generated by a relatively better educated labour force would provide resources for greater allocations to education.

<sup>246</sup>All figures are for 1962. The conversion into rupees has been done at the post-devaluation rates of exchange.

19.41 The second is the need to realize the simple but elementary point that it is impossible to create an educational system which would meet the individual and national needs if conventional techniques, existing practices of under-utilization and wastage were to continue. It would, therefore, be necessary to make every rupee go the longest way possible by adopting measures for economy, for reduction of wastage, and for intensive utilization. These should receive the greatest emphasis and the most earnest consideration. The manner in which this can be done has been indicated in the appropriate context in earlier chapters. Even at the risk of some repetition, however, we would enunciate a few of the points which are significant from the financial point of view:

- (1) The utmost economy possible should be practised in the construction of buildings.
- (2) The cost of equipment could be reduced considerably by better
- (3) Techniques in which certain facilities could be shared in common by a group of schools (i.e. a circulating library for rural should be encouraged and adopted on a large scale.
- (4) Where equipment and facilities become costly and sophisticated, they should be intensively and cooperatively utilized for the largest part of the day and throughout the year.
- (5) Whenever possible, educational buildings should be put to use for as long as possible in the day and, wherever needed, at night as well.
- (6) Larger classes and higher pupil-teacher ratios are inevitable for some years to come, and it would only be a disservice to education to adopt the practices of affluent societies in this regard. In a developing economy, we must accept these as facts of life and meet their challenge through the development of appropriate techniques and hard work.
- (7) There is no justification for the continuance of the large wastages which now prevail at every stage. Their reduction should be a definite national target and, to that end, programmes for the active involvement of each individual institution in the process should be encouraged. This is the only way to meet the situation.
- (8) The working day should be longer and the number of working days should be increased. The vacations should be utilized as fully as possible and designated as vacation 'terms'.
- (9) Programmes of Part-time and own-time education should be organized on as large a scale as possible to meet the increasing demand for education from workers as well as from those who cannot be provided with a place in full-time institutions.
- (10) The education of the gifted children should be attended to on a top priority basis.

(11) With a view to raising quality all round and in all institutions in the shortest time possible, it is essential to concentrate resources, in the immediate future, on the development of some centres of excellence and quality institutions at all stages of education, particularly in secondary and higher education. This programme should be given a very high priority.

(12) Places in full-time institutions of secondary and higher education should be provided with due regard to manpower needs and maintenance of standards and admissions to them should be made on the basis of an egalitarian selection.

(13) Sectors of education which have a multiplying effect like postgraduate studies or teacher education or those which have a direct relationship with an increase in productivity such as agricultural and technical education, or those which tend to decrease wastage or intensify utilization.

(14) Wasteful expenditure which often arises from rigidities of administrative and financial procedures should be avoided by introducing flexibility and adequate decentralization of authority.

(15) Greater emphasis should be placed on programmes which need more of human talent, dedication and hard work (such as preparation of textbooks, teaching and learning aids, research, etc.) than on those which involve large investment of physical and financial resources.

(16) A vigorous attempt should be made to establish institutions of optimum size at all levels of education because these would be more efficient and less costly.

19.42 Since an under-developed economy cannot aspire to match the levels of per capita educational expenditure of the developed ones, the problems of educational reconstruction in India can be tackled only on the basis of an approach which meets our special situation. A mere imitation of some of the techniques and programmes of education in developed societies will not meet our requirements. The complexity of our problems, and the necessity of connecting education with life, particularly productivity, have to be identified and solutions worked out which take care of the specific needs of the country. It is our firm view that while a careful study of major educational developments in other countries is essential to enable us to draw upon their experiences, there is no substitute for original, hard and serious thinking involved in a sustained and serious effort to make our meagre resources go the longest way possible.

19.43 This implies emphasis on research in all sectors of education. Our general proposals for the development of educational research have been discussed elsewhere.<sup>247</sup>

<sup>247</sup>Chapter XII.

Here, we would only highlight the need to conduct research in the problems of economics and financing of education which are only just receiving the attention of economists and educationists in our country. Among other things, there is urgent need to examine continually the relationship between cost and quality and to develop programmes which would obtain the highest possible quality for a given level of input (or minimize inputs for a given level of quality). We recommend that the UGC should provide financial support for the development of such studies in a few selected universities and that a similar programme for the school stage should be developed in the NCERT and the State Institutes of Education.

19.44 The estimates of total educational expenditure given above are admittedly tentative. As we have emphasized, extensive research is needed on the study of unit costs and educational productivity. In the light of these studies, these estimates will have to be continually revised. Moreover, it is likely that they will be attacked on both sides. On the one hand, some persons would argue that they are on the low side and that they will have to be upgraded substantially if education of the appropriate quality and in adequate quantity is to be provided. On the other hand, they will also be attacked on the ground that they are over-system of education on the lines indicated in the Report is organized ambitious and unrealistic. What is important; however, is that a national without delay and an earnest effort is made to provide all the needed will have to be faced and risks taken. But in an age of science, there resources for the purpose. In doing so of course, many hard choices can be no greater risk than a policy of drift and niggardliness in education.

## SUMMARY

**1 Total Expenditure on Education.** If education is to develop adequately, educational expenditure in the next 20 years should rise from Rs. 12 per capita in 1965-66 to Rs. 1985-86 (at constant prices). This implies that the educational expenditure, which increased from Rs. 1,144 millions in 1950-51 to Rs. 6,000 millions in 1965-66, will further rise to Rs. 40,364 millions in 1985-86 and that the proportion of GNP allocated to education will rise from 2.9 per cent in 1965-66 to 6.0 per cent in 1985-86. 19.21-24

**2 Allocation of Funds.** While the broad pattern of educational expenditure in the different sectors of education during the next two or three decades will be to devote two-thirds of the available resources to school education and one-third to higher education, the relative emphasis on programmes should change from decade to decade as follows:

(1) From 1965 to 1975, the relative emphasis should be on a larger expenditure at the school stage. This will be necessary in order (i) to upgrade the salaries of school teachers; (ii) to transfer the PUC and the Intermediate classes from the university to the school stage; (iii) to provide at least five years of effective education to all children; and (iv) to vocationalize secondary education.

(2) The programmes to be emphasized during the decade 1975 to 1985 will include the provision of seven years of effective primary education, the addition of one year to the school stage and vocationalization of secondary education. During this decade, emphasis should begin to shift in favour of higher education.

(3) After 1985, there will be increased emphasis on the development of higher education and research. 19.25

**3 Sources of Educational Finance.** (1) Although most of the responsibility for the support of education will be placed on governmental funds, a total centralization of all financial responsibility for education in the Government will not be desirable. Attempt should, therefore, be made to raise contributions from local communities, voluntary organizations and the local authorities for this purpose.

(2) The assistance of the local community should be mobilized through the organization of school improvement conferences for improving the physical facilities in schools and the creation of school funds.

(3) In order to provide financial support to District School Boards, the Zila Parishads should raise funds for education by levying cess on land revenue. The State should prescribe the minimum rate of the levy and authorize the Zila Parishads to raise it to a certain prescribed maximum. In order to stimulate the collection of funds, the Government should give grant-in-aid proportionate to the additional revenues thus collected by the Zila Parishad. 19.14-20

**4 Grant-in-aid to Zila Parishads.** (1) The system of grant-in-aid from the State Government to Zila Parishads should be reformed on the following lines:

(a) 100 per cent grant for salaries and allowances of teachers and other administrative and supervisory staff sanctioned by the Government. Definite norms regarding the number of teachers required and the administrative and supervisory staff needed should be fixed.

(b) For non-teacher costs, a block grant per child in attendance should be given. The amount of this grant should be fixed separately for each category of schools and should be revised after every 3 to 5 years.

(c) The resources raised locally by a Zila Parishad as well as the State grant thereon should be left with the Zila Parishad for such developmental programmes as it deems necessary; and

(d) Grant-in-aid for non-recurring expenditure should be given separately, preferably at about two-thirds of the expenditure.

(2) The amount of grant-in-aid given by the State Government to Zila Parishads should be allowed to be funded and not made to lapse at the end of the financial year. (Para 2, Supplementary Note I.)

**5 Grant-in-Aid to Municipalities.** (1) It should be made obligatory for the Municipalities to bear a certain proportion of the cost of education. For this purpose, they should levy a cess on lands and buildings.

(2) For the purpose of Government grants, the Municipalities should be classified into groups on the basis of their wealth and the poorer Municipalities should be given grant-in-aid at a higher rate than others.

(3) All Corporations should be made responsible for supporting at least primary education within their jurisdiction. The Government grant to them should be on a proportional basis so that the Corporations contribute a certain percentage of the expenditure from their own funds. (Para 4, Supplementary Note I.)

**6 The Role of the Centre.** The Central Government should assume a larger financial responsibility for education by expanding the Central and centrally sponsored sectors. It should have the following characteristics:

(1) It should include programmes of crucial importance and national in character.

(2) In the Centrally sponsored sector, it should be possible for some programmes to vary from State to State according to their needs.



(3) Central assistance for programmes in the centrally sponsored sector should be given for five years which may in certain cases be continued up to 10 years and not for plan periods only as at present.

(Paras 9-15, Supplementary Note I.)

**7 Economies and Utilization.** Even with the mobilization of maximum resources for education, the funds will still be inadequate to meet even the minimum needs of educational reconstruction, if conventional techniques involving large wastage and stagnation continue. It would, therefore, be necessary to adopt measures for economy, for eradication of wastage and for most efficient utilization of funds. Some of these measures have been indicated in paragraph 20.44. These and all other measures, which promote economy consistent with efficiency, should be adopted. 19.41

**8 Research.** Studies conducted in some other countries indicate the importance of education for economic growth, but no such studies have been conducted in India so far. In view of the importance of the subject, the UGC should encourage studies on the subject to be conducted in a few universities. 19.43

## NEED FOR VIGOROUS AND SUSTAINED IMPLEMENTATION

19.45 In the last eighteen years, there have been two commissions and a large number of committees appointed by the Government of India which have reported on different aspects of education. In addition, there have also been a large number of committees appointed by the State Governments whose reports are of local as well as of national significance. Moreover, numerous advisory bodies have made innumerable recommendations on almost every aspect of education. All the same, the development of education in the post-Independence period leaves much to be desired; and as the Government Resolution appointing this Commission has pointed out, 'a wide and distressing gulf continues to persist between thought and action and programmes concerning the quality of education, even when these were well-conceived and generally agreed to, could not be implemented satisfactorily'. It is this aspect of the problem that should be our major concern.

19.46 We would like to emphasize that there is no place for half-hearted policies in the days ahead. The economic prosperity of the country, the social and national cohesion of its life, the level of its cultural and spiritual development, its place in the comity of nations and its contribution to the life of Man—all these depend upon the quality of men and women we have; and this, in its turn, depends essentially upon the education we provide. Educational reconstruction is thus crucial for our future and extremely urgent (it has to be completed within the life-span of a generation at the most). It is also unusually difficult because it has to be accomplished with comparatively meagre resources in terms of men, materials and money. In spite of these difficulties, it has to be taken up in earnest immediately and pursued intensively. We stand at the critical cross-roads of history where the choice is between education and disaster. We must either build a sound, balanced, effective and imaginative educational system to meet our developing needs and respond to our challenging aspirations or be content to be swept aside by the strong currents of history.

**19.47 Essentials for Successful Implementation.** A vigorous and sustained implementation of the recommendations made in the Report demands a higher priority than that given so far to education in our national plans for development. A deliberate commitment about the crucial role of education in national development can alone provide the psychological motivation and energy needed for a massive programme of implementation. We realize that such conviction will depend essentially upon the extent to which education is effectively and demonstrably related to the life, needs and aspirations of the country. This is a task mainly for the educators, and it is the urgency of this that we have emphasized in the Report.

19.48 Equally essential is the need for dedicated hard work. Today, the nation is facing, as never before, the challenge of hunger, unemployment, ill-health and poverty. A vital element which would help the country to meet this challenge is a revitalized education which, in its turn, can only be created if the leaven of idealistic teachers and administrators exists. Idealism is needed, now more than ever, in all walks of life and

especially in education. It may not be easy to plan for it; but it is doubtful if anything worth while will be achieved if we cannot generate it in fair measure.

19.49 Education thus needs and demands, more than anything else, hard work and dedicated service. In particular, it presents a supreme challenge to the students, teachers and educational administrators who are now called upon to create a system of education related to the life, needs and aspirations of the people and to maintain it at the highest level of efficiency. It is upon their response to this challenge that the future of the country depends.

19.50 We have emphasized that educational and national reconstruction are intimately interrelated and that perhaps the most effective way of breaking the vicious circle in which we find ourselves at present is to begin educational reconstruction in a big way. We would, however, like to point out that it will not be possible to make much headway in education unless the basic problems of life are also squarely faced and resolutely tackled. This stresses the interlinking of education and national development.

19.51 Finally, we would like to emphasize three points which are obvious but generally tend to be ignored:

-The report of a commission is not a substitute for action. Its purpose is to generate action. A report which is shelved or does not lead to action is worse than no report because it leads to frustration by arousing hopes that remain unfulfilled.

- Time is the essence of the problem. The next few decades are crucial and the future of the country depends largely upon what is done about education during the next ten years or so'. The decisions on several recommendations made in this Report need to be taken quickly. Action must start forthwith and continue at an ever increasing pitch of intensity in the years to come.

- The responsibility of implementing the Report is primarily that of the Government-Central and States. If no one else will or can.

this tremendous challenge, there will be an adequate response.

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S. A. SHUMOVSKY  
JEAN THOMAS  
J. P. NAIK  
J. F. MCDOUGALL

New Delhi 29th June, 1966

Now that the work of the Commission has been completed we should like to say what a privilege it has been to have been associated with it. In particular, we wish to express our appreciation of the generosity of spirit with which our collaboration has been welcomed, not only by our fellow-members but by everyone with whom the work has brought us into contact. We would like to think that just as the invitation to us was an expression of the international-mindedness of India, so our participation may be taken as a sign of the goodwill of other countries towards India. We realize that to carry out the recommendations of the Report will be difficult and will call for great resolution; but we have confidence that their acceptance and implementation will lead to a decisive step forward in the education and the well-being of the Indian people.

H. L. ELVIN  
SADATOSHI IHARA  
ROGER REVELLE  
S. A. SHUMOVSKY  
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## SUPPLEMENTAL NOTES 1

### ***GRANT-IN-AID FORM STATE GOVERNMENTS TO LOCAL AUTHORITIES URBAN AND RURAL : CENTRE-STATE RELATIONSHIP IN FINANCIAL SUPPORT TO EDUCATION***

SI.01 We have recommended that the administration of school education in a district should be transferred to District School Boards and that in areas of bigger municipalities to Municipal School Boards.<sup>248</sup> We have further suggested that even smaller municipalities should be associated with the administration of education within their areas and be made to bear a certain portion of the expenditure thereon. In this note, we shall make a few suggestions regarding the manner in which grant-in-aid to these authorities, for educational purposes, shall be used to stimulate local contributions and thereby get larger revenues for education incidentally, we shall also discuss briefly the Centre-State relationship in the financing of education.

**SI.02 Grants-in-Aid to District School Boards.** The Zila Parishads have an authority to levy a cess on land revenue for purposes of education in this context, we recommend that the State should prescribe the minimum cess to be levied by a Zila Parishad and also authorize it to raise the same voluntarily up to a prescribed maximum. In order to stimulate the use of this authority, a grant-in-aid proportionate to the additional revenues thus raised should be guaranteed. A device of this type has been adopted in Maharashtra State and it is found that most of the Zila Parishads have raised the cess substantially. It is possible that a similar result may be obtained elsewhere also.

SI.03 The existing system of grant-in-aid to local authorities needs revision. An analysis of the existing practices on the subject shows considerable variation. In some States, the grants are given on a deficit basis, and it is the general experience that, under this system, the politically important and vocal districts, rather than the needy or backward areas, get the most benefit and there is no incentive to economize. When 'proportional' grants are given as a percentage of the total expenditure, the richer districts tend to get larger grants; and innumerable problems arise regarding the 'approved' or 'admissible' expenditure. The 'block' grants tend to be inelastic and particularly unsuitable in a situation when expenditure in education is rising fast. On an overall view of the existing practices, therefore, we suggest that a reform of the grant-in-aid procedures in respect of Zila Parishads be carried out on the broad outlines indicated below:

(1) The grant-in-aid for the salaries and allowances of teachers and other administrative and supervisory staff sanctioned by Government should be on a 100 per cent basis; some definite rules should be prescribed regarding the basis on which the number of teachers

<sup>248</sup>Chapter XVIII.

required should be calculated (e.g., on the basis of enrolment). The administrative and supervisory staff could be related to the number of teachers.

(2) For the non-teacher costs, a block grant per child in attendance should be given. The amount of this grant should be fixed separately for each category of schools and should be revised every three to five years.

(3) The resources raised locally by the Zila Parishad, as well as the State grant thereon, should be left with the Zila Parishad for such developmental programmes as it deems necessary.

(4) Grants-in-aid for non-recurring expenditure should be given separately, preferably at about two-thirds of the expenditure.

The major objective of the system of grant-in-aid to Zila Parishads should be to equalize educational opportunities. This should be kept in view while sanctioning the posts of teachers or deciding the recurring grant-in-aid per pupil or the proportion of the non-recurring grant to be given. Moreover, the amounts of grant-in-aid should be allowed to be funded and not made to lapse at the end of the financial year, as this encourages economy and a careful use of resources.

**SI.04 Grant-in-Aid to Municipalities.** From the quantitative point of view, the municipal funds are even more important than the contributions of the Zila Parishads because they are growing rapidly on account of industrialization, urbanization, and the increasing concentration of wealth in urban areas. In the erstwhile British Indian Provinces, the municipalities were made to pay for the support of primary education as early as in 1882. A tradition has thus grown up and we now find municipalities like Bombay spending a few million a year on primary education. On the other hand, in the erstwhile princely States, the municipalities were not entrusted with primary education nor paid for it. Thus, even the big municipalities like Hyderabad, Bangalore or Gwalior make no contribution in support of primary education. There is no reason why the richer urban areas should be exempted from responsibility for education. We recommend that all municipalities should be compelled to pay for a portion of the cost of education in their areas by the levy of a cess on land and buildings. Even a minimum cess of two per cent of the annual letting value of real property in urban areas can secure a fair and increasing contribution to the support of education.

SI.05 In devising a system of grants to municipalities for school education, it is essential to remember that the municipalities show an immense variation in their wealth and capacity to support education. For instance, a small municipality in a semi-rural township of 5 to 15 thousand population has a very limited capacity to raise funds in support of education compared with a big corporation like that of Bombay. It is, therefore, necessary to devise a system of grant-in-aid which will vary from one group of municipalities to another; and in our opinion, the best procedure would be to adopt a method under which the municipalities could be classified on the basis of their wealth and the poorer municipalities given a higher rate of grant-in-aid than the richer ones. This principle was

enunciated, as early as in 1937, by the Kale Committee of the then Bombay State, and a good deal of experience in its implementation has been gained in the States of Gujarat and Maharashtra. This could be of considerable use to other areas adopting the programmes.<sup>249</sup>

SI.06 The cases of the larger corporations like Bombay, Madras, Calcutta or Delhi, which form the wealthiest group among the municipalities, would have to be considered separately. At present, the position shows great variation. For the Bombay Corporation, the State Government gives a block grant which now stands at Rs. 6.8 million in a total educational expenditure of Rs. 54 million. In Calcutta, the corporation spends about Rs. 3.8 million and gets no grant-in-aid. In Madras, an identical grant-in-aid formula applies to all municipalities, from the smallest to the biggest. At present, the Government grant to the Madras Corporation is equal to Rs. 4.1 million in a total expenditure of Rs. 13.4 million. Several big corporations like Hyderabad have no financial responsibility at all in education. It would be desirable to make all corporations responsible at least for primary education and give them grant-in-aid on a proportional basis, i.e. at a certain percentage to be fixed for a corporation depending upon its resources. The same principle would apply to other large municipalities which have a School Board, the only difference being that the grant-in-aid would be generally at a higher percentage than that in regard to corporations.

SI.07 The smaller municipalities will be able to contribute even less. By and large, they should be made responsible for all non-teacher costs (the teacher costs being borne fully by the State Governments) and should be required to meet them by the levy of a local cess on lands and buildings in their areas and a suitable grant-in-aid towards it given by the State Government, on an equalization basis.

**SI.08 Equalization.** We have recommended grants-in-aid from the State Government to the Zila Parishads and the municipalities on the basis of equalization. It is necessary to explain this new concept of grant-in-aid which has been in successful operation in the USA for a number of years. The central concept of equalization is that, for a given local effort, the local authority must be able to reach a given level of expenditure per child. For instance, in the case of two municipalities-A and B--let us assume that

- the level of equalization in primary education has been fixed at a recurring expenditure of Rs. 50 per child per year;

- it has also been decided that each municipality should contribute, to the expenditure on primary education, at the rate of two per cent of the annual letting value of real property within its area; and

<sup>249</sup>A similar recommendation was made by the Committee of Ministers constituted by the Central Council of Local Self-Government, 1963.

- this rate produces an income of Rs. 10 per child in municipality A and Rs. 20 per child in municipality B.

Under these circumstances, the grant-in-aid of the State Government to municipality A would be Rs. 40 per child and to municipality B, Rs. 30 per child.

**SI.09 The Role of the Central Government in the Financing of Education.** It has been stated above that the contribution of 'Government funds' to total educational expenditure may have to be increased from the present level of 71 per cent to about 90 per cent <sup>250</sup> This is the contribution of the Central and State Governments taken together. For a clarification of the position, however, it is necessary to discuss the contribution of the Central Government separately. The State Governments have the residual responsibility to finance education, i.e. they must find all the funds required for education after allowance is made for contributions by the Central Government, the local authorities and other sources.

SI.10 The Government of India gave special grants to the Provinces for educational purposes from 1870 (when authority over education was first decentralized to them) to about 1921. These were particularly large between 1902 and 1914 which was a period of comparative boom in the Central revenues. They were, however, discontinued in 1921 when education was transferred to Indian control in the Provinces. One of the outstanding events of the post- Independence period is the resumption of assistance by Central Government for education and these have continuously increased during the first three plans. In addition, the Central Government has been incurring considerable direct expenditure on education. These two forms of Central financial support to education will have to be considered separately.

**SI.11 Direct Central Expenditure on Education.** Table SI.1 shows the growth of direct Central expenditure on education from 1950-51 to 1960-61, the latest period for which statistics of expenditure are available.

It will be seen that the total educational expenditure from the funds of the Central Government has increased from Rs. 35 million in 1950-51 to Rs. 296 million in 1960-61 which implies an average annual increase of 23.7 per cent which is considerably greater than that in the total educational expenditure which increased at an average annual rate of 11.7 per cent only. It will be seen further that the bulk of the Central expenditure on education is incurred on higher education and on buildings and scholarships which are also mostly meant for higher education only. This is in keeping with the constitutional responsibility of the Government of India to coordinate and maintain standards in higher education.

<sup>205</sup>We expect that the balance of 10 per cent would be made by fees (3 p.c.), contribution of local authorities (4 p.c.) and voluntary contributions and donations from the people (3 p.c.).



SI.12 In the Third Plan, Central expenditure on education increased still further at about 18 per cent per year as shown in Table SI.2. Its detailed distribution over different sectors is not available.

SI.13 In the days ahead, the Centre will have to assume a still larger financial responsibility for education through the expansion of the Central sectors. Our proposals on this subject have been detailed in the appropriate context in the earlier chapters of this Report. By way of reference, we give below some of the programmes which we have recommended for inclusion in the Central sector.

- (1) Expansion of the programme of national scholarships;
- (2) Expansion of the programmes of scholarships for the backward classes;
- (3) Larger allocations to the UGC for - development of Centres of Advanced Study and major universities ;
  - developing Schools of Education in a few selected universities;
  - developing postgraduate education and research;
  - provision of maintenance grants to State universities;
  - establishment of the Central Testing Organization; and
  - development of literature in modern Indian languages.
- (4) Development of agricultural, engineering and medical education.
- (5) Promotion of educational research.

TABLE SI.1. EDUCATIONAL EXPENDITURE THROUGH CENTRAL GOVERNMENT FUNDS BY OBJECTS (1950-51 to 1960-61)

| Type of institution/object                                       | Expenditure on education through Central Government Funds |                |   |         |
|--|---|----------------|---|---------|
|  | Amount (Rs. in 000's)                                     |                | Percentage of expenditure on the object to total expenditure from Central Govt. Funds |         |
|  | 1950-51<br>Rs.  | 1960-61<br>Rs. | 1950-51   | 1960-61 |
| <b>Direct Expenditure ..</b>                                     |   |                |   |         |
| Pre-primary Schools  | ..  | 187            | ..  | 0.1     |
| Lower Primary Schools  | 468   | 17,943         | 1.3   | 6.1     |
| Higher Primary Schools   | 308   | 11,914         | 0.9   | 4.0     |
| Secondary Schools  | 2,229   | 6,412          | 6.3   | 2.2     |
| Schools for Teacher Training                                     | ..  | 1,778          | ..  | 0.6     |
| Schools for Vocational Education (excluding Teacher Training)    | 1,720   | 9,241          | 4.9   | 3.1     |
| Schools for Special Education                                    | 104   | 1,087          | 0.3   | 0.4     |
| Universities and Institutions for Higher Education               | 11,591  | 58,962         | 32.9  | 19.9    |
| Colleges for Teacher Training                                    | 136   | 1,100          | 0.4   | 0.4     |
| Colleges for Professional Education (excluding Teacher Training) | 7,928   | 30,255         | 22.5  | 10.2    |

|  |        |         |       |       |
|--|--------|---------|-------|-------|
| Colleges for Special Education               | 127    | 1,378   | 0.4   | 0.5   |
| Total (Direct Expenditure)                   | 24,611 | 140,259 | 69.8  | 47.4  |
| Indirect Expenditure                         |        |         |       |       |
| Direction and Inspection                     | ...    | 673     | ..    | 0.2   |
| Buildings                                    | 8,278  | 111,447 | 23.5  | 37.7  |
| Scholarships and other financial concessions | 1,769  | 32,478  | 5.0   | 11.0  |
| Hostel charges                               | 158    | 1,106   | 0.4   | 0.4   |
| Miscellaneous                                | 431    | 9,815   | 1.2   | 3.3   |
| Total (Indirect Expenditure)                 | 10,636 | 155,519 | 30.2  | 52.6  |
| GRAND TOTAL                                  | 35,247 | 295,778 | 100.0 | 100.0 |

N.B. Totals do not tally due to rounding.

Source. Form A of the Ministry of Education, Government of India.

TABLE SI.2. BUDGETED CENTRAL EXPENDITURE ON EDUCATION IN THE THIRD PLAN

| Year    | Budgeted expenditure of the Government of India (excluding grants to States)<br>(Rs. in 000's) |
|---------|--|
| 1961-62 | 333,428  |
| 1962-63 | 459,636  |
| 1963-64 | 428,794  |
| 1964-65 | 617,938  |
| 1965-66 | 756,194  |

**SI.14 Central Grants to States for Education.** The Central grants to States under the awards of the Finance Commission are not discussed here because they are not earmarked for education. It is only the developmental grants given Under the five-year plans that are so ear- marked and the data about these are given in Table SI.3.

**SI.15 The Centrally Sponsored Sector.** These grants can be sub- divided into two sub- categories: (1) grants-in-aid for schemes included in the State plans; and (2) grants-in-aid under the Centrally sponsored sector. We do not propose to discuss the first category which forms a part of the Central assistance to the State plans as a whole and whose quantum and character vary from plan to plan. We are particularly concerned with the second category, namely, grants-in-aid under the Centrally sponsored sector. It will be recalled that we have recommended a large expansion in the Centrally sponsored sector and that the following are some of the schemes to which we have recommended aid under this Sector:

- (1) Training of teachers;
- (2) Introduction of vocational education at the secondary stage;
- (3) Development of the State Institutes of Education;
- (4) Production of literature for children and teachers; and
- (5) Development of quality institutions at the school stage.

Other programmes of a similar type which can be assisted have been indicated in the appropriate context in the different parts of the Report.

SI.16 Some problems relating to the administration of the Centrally sponsored sector need attention. In this context, we make the following recommendations:

- (1) In selecting programmes to be included in Centrally sponsored sector the State Governments should be consulted.

TABLE SI.3. EXPENDITURE ON EDUCATION (REVENUE ACCOUNT) FROM  
CENTRAL AND STATE GOVERNMENT FUNDS (1951-52 to 1965-66)

(Rs. in millions)

| Year                              | Revenue expenditure on education |                                  |  | Combined<br>revenue<br>expendi-<br>ture of<br>the Centre,<br>States<br>& Union<br>Territories | Grant-in-<br>aid from<br>Centre to<br>States<br>(Col. 4<br>minus<br>Col. 5) |
|-----------------------------------|----------------------------------|----------------------------------|--|---|---|
|                                   | Centre                           | States<br>& Union<br>Territories | Total<br>(Centre &<br>States)<br>including<br>grants |   |   |
| 1                                 | 2                                | 3                                | 4  | 5   | 6   |
| 1951-52                           | 40.8                             | 602.8                            | 643.6  | 641.3   | 2.3   |
| 1952-53                           | 33.2                             | 688.0                            | 721.2  | 714.4   | 6.8   |
| 1953-54                           | 43.0                             | 757.5                            | 800.5  | 785.8   | 14.7  |
| 1954-55*                          | 24.3                             | 859.6                            | 883.9  | 899.7   | -15.8   |
| 1955-56                           | 142.3                            | 1,037.9                          | 1,180.2  | 1,104.3   | 75.9  |
| 1956-57                           | 194.4                            | 1,142.4                          | 1,336.8  | 1,134.2   | 202.6   |
| 1957-58                           | 209.8                            | 1,304.4                          | 1,514.2  | 1,477.6   | 36.6  |
| 1958-59                           | 278.9                            | 1,472.4                          | 1,751.3  | 1,634.7   | 116.6   |
| 1959-60                           | 366.9                            | 1,709.0                          | 2,075.9  | 1,897.0   | 178.9   |
| 1960-61                           | 437.9                            | 1,954.1                          | 2,392.0  | 2,152.2   | 239.8   |
| 1961-62                           | 13.3                             | 2,344.8                          | 2,858.1  | 2,604.0   | 254.1   |
| 1962-63                           | 500.2                            | 2,505.9                          | 3,006.1  | 2,788.3   | 217.8   |
| 1963-64                           | 570.8                            | 2,833.3                          | 3,404.1  | 3,138.1   | 266.0   |
| 1964-65<br>(Revised<br>Estimates) | 741.0                            | 3,293.6                          | 4,034.6  | 3,693.3   | 341.3   |
| 1965-66<br>(Budget<br>Estimates)  | 880.4                            | 3,759.8                          | 4,640.2  | 4,268.2   | 372.0   |

Source. Indian Economic Statistics, Part II, Public Finance, issued by the Ministry of Finance.

Note. 1. The figures relate to expenditure on education through the Ministry of Education only and exclude the expenditure on education incurred by other Ministries and Departments.

2. \*The figures for 1954-55 seem to be wrong. As the details are not available, these could not be reconciled.

(2) One criterion for including programmes in the Central sector is that they should be of crucial importance and national in character. Programmes which need the adoption of a common policy in all parts of the country should preferably be included in the centrally sponsored sector.

(3) The local needs of the States vary considerably. It would, therefore, be desirable to include, in the Centrally sponsored sector, some programmes which may vary from State to State. One method of doing so would be to divide the total funds available in the Centrally sponsored sector into two parts, about half of them being allocated to national programmes which are referred to above. The other half should be made available to the State Governments, on some equitable basis, and they should be free, with the approval of the Government of India, to use them for any scheme which is significant and urgent in their local situation.

(4) The assistance to centrally sponsored schemes generally continues for the plan period. Very often it is not possible to start new centrally sponsored schemes in the beginning of the plan; and if they are started late, the State Governments are unwilling to accept them because they would not get full financial assistance. It would, therefore, be desirable to make Central assistance for centrally sponsored schemes available to the States, on a five-year basis rather than on the basis of a plan period. For some important schemes in the centrally sponsored sector, assistance may even be continued for a longer period, say, 10 years.

## SUPPLEMENT NOTE II

### TENTATIVE ESTIMATES OF EXPENDITURE ON THE DEVELOPMENT OF SCHOOL EDUCATION (1966-85)

SII.01 The object of this note is to give a tentative estimate of expenditure on school education-recurring and capital. The estimate is attempted for two years only--1975-76 and 1985-86.

#### PRE-PRIMARY EDUCATION

SII.02 The proposals for the development of pre-primary education have been detailed in Chapter VII (Vol. II).

SII.03 The estimated enrolments at this level would be the following:

(a) In 1965-66, the enrolment in pre-primary education proper was 250,000. We expect this to rise to 0.5 million in 1975-76 and to 2.4 million in 1985-86.

(b) The enrolment in the second category (i.e. class I of those States where the school course is of 11 years up to the matriculation and in Infant A and B of Assam and Nagaland) was 11.5 million in 1965-66. But this contains not only children in the age 5-6, but also some children below five and a large proportion of those who are above six. The attempt to be made in future is to introduce the system of pre-registration, i.e. this class will admit children only of 5. At the same time, all older children will be promoted to regular class I of the primary school. As this process goes on, more and more children in the age-group 5-6 will come in (the target to be reached by 1985-86 being 50 per cent of the age-group 5-6) and older children will go up to class I. As the two processes will be simultaneous, we have assumed that the enrolment at this level will be constant at 10 million each in 1975-76 and 1985-86. The break-up of this enrolment will be as follows:

TABLE SILL BREAK-UP OF ESTIMATED FUTURE ENROLMENT AT PRE-PRIMARY STAGE

|  | (in 000's)                                  |                             |  |
|--|---|-----------------------------|--|
|  | 1965-66                                     | 1975-76                     | 1985-86                                  |
| Pre-primary proper: Age-group 3-5        | 250   | 513                         | 2,352                                    |
| Pre-primary (other types): Age-group 5-6 | 11,523                                      | 9,487                       | 7,648                                    |
|  | (contains a large part of overage children) | (contains overage children) | (About 50 per cent of the age-group 5-6) |
| TOTAL                                    | 11,773                                      | 10,000                      | 10,000                                   |

SII.04 The cost of pre-primary education proper estimated as follows:

TABLE SII.2. ESTIMATED COST OF PRE-PRIMARY EDUCATION

|  | 1975-76 | 1985-86 |
|--|---------|---------|
| (1) Average annual salary of a teacher (Rs.)         | 1,800   | 2,500   |
| (2) Add 10 per cent for retirement benefits (Rs.)    | 180     | 250     |
| TOTAL (Teacher Costs) (Rs.)                          | 1,980   | 2,750   |
| (3) Non-teacher costs at one-half of the above (Rs.) | 990     | 1,375   |
| TOTAL COST (RS.)                                     | 2,970   | 4,125   |
| (4) Pupil-teacher ratio                              | 40      | 40      |
| (5) Cost per pupil (Rs.)                             | 74.3    | 103.1   |

SII.05 For other types of pre-primary education, cost has been assumed at Rs. 20 per pupil for 1975-76 and Rs. 30 per pupil for 1985-86.

SII.06 The total recurring cost of the programme would thus be:

TABLE SII.3. TOTAL RECURRING COST OF PRE-PRIMARY EDUCATION

|  | 1975-76<br>(Rs. in 000's) | 1985-86<br>(Rs. in 000's) |
|--|---------------------------|---------------------------|
| (1) State level centres<br>@ Rs.100,000 per centre   | 1,600                     | 1,600                     |
| (2) District level centres<br>@ Rs. 50,000 per centre (150 in<br>1975-76 and 300 in 1985-86) | 7,500                     | 15,000                    |
| (3) Pre-primary education of the standard type   | 38116                     | 242,491                   |



|                                       |         |         |
|---------------------------------------|---------|---------|
| (4) Pre-primary education-other types | 189,740 | 229,440 |
| TOTAL                                 | 236,956 | 488,531 |

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### LOWER PRIMARY EDUCATION

SII.07 At this level, we have recommended a pay scale of Rs. 150-250 with a selection grade rising to Rs. 300. The average of this scale by 1975-76 will be Rs. 1,800 (as against Rs. 1,046 in 1965-66) and Rs. 2,500 for 1985-86.

SII.08 The non-teacher expenditure per student (which is only Rs. 3 at present) will have to be increased to Rs. 12 by 1985-86 as follows:

TABLE SII.4. NON-TEACHER EXPENDITURE AT LOWER PRIMARY STAGE

|  | Rs. |
|--|-----|
| (1) Free supply of books and writing materials                                   | 5   |
| (2) Equipment (at Rs. 30 per student with an average estimated life of 10 years) | 3   |
| (3) Contingent expenditure   | 4   |
| TOTAL  | 12  |

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We have assumed that it would be possible to raise the cost to about Rs. 8 per child by 1975-76 and to about Rs. 12 per child by 1985-86.

SII.09 We have suggested a pupil-teacher ratio of 40 with an upper limit of 50 for each class. During the next ten years, however, larger classes would be inevitable. We, therefore, suggest the adoption of the three-hour session System in classes I and II. As more resources become available, it may be gradually discontinued. This will enable us to have a pupil-teacher ratio of 50 by 1975-76 which will be reduced to 45 by 1985-86.

SII.10 We have also recommended that 10 per cent of the schools should be upgraded to the optimum standard (Le., to about double the cost per pupil).

SII.11 The objective at this stage is to provide universal full- time education to all children. The enrolment on this basis has been detailed in Chapter VII (Vol. II).

SII.12 On these assumptions the cost per student at the lower primary stage would be as follows:

TABLE SII.5. COST PER STUDENT AT LOWER PRIMARY STAGE

|   | 1975-76 | 1985-86 |
|---|---------|---------|
| (1) Average annual salary of a teacher (Rs.)  | 1,800   | 2,500   |
| (2) Add 10 per cent for retirement benefits (Rs.)   | 180     | 250     |
| TOTAL (Teacher Costs) (Rs.)   | 1,980   | 2,750   |
| (3) Non-teacher costs (Rs. 8 per pupil in 1975-76 and Rs. 12 per pupil in 1985-86)  | 400     | 540     |
| TOTAL COST (RS.)  | 2,380   | 3,290   |
| (4) Pupil-teacher ratio   | 50      | 45      |
| (5) Cost per pupil (Rs.)  | 47.6    | 73.1    |
| (6) As 10 per cent of the schools are to be raised to a higher standard of quality (say, double the cost per pupil) the cost would be (Rs.) | 52.4    | 80.4    |

SII.13 The cost of the programme will then be as shown in the following table:

TABLE SII.6. TOTAL COST OF EDUCATION AT LOWER PRIMARY STAGE

|                                | 1975-76   | 1985-86   |
|--------------------------------|-----------|-----------|
| (1) Total enrolment (in 000's) | 71,550    | 76,239    |
| (2) Cost per pupil (Rs.)       | 52.4      | 80.4      |
| (3) Total cost (Rs. in 000's)  | 3,749,220 | 6,129,616 |

## HIGHER PRIMARY EDUCATION

SII.14 At this stage, we expect facilities for about 90 per cent of the age-group by 1985-86. Of these, part-time education will be provided for 20 per cent of the children, both in 1975-76 and in 1985-86. In the first decade, the part-time classes will be of two types: (1) for those who have already completed the lower primary stage. and want to continue their studies further; and (2) literacy classes for those who have not been to school or have not been able to complete the lower primary stage. In the second decade, only the first category of part-time facilities will remain. But the numbers enrolled therein would increase. The details of these programmes have been discussed in Chapter VII (Vol. II).

SII.15 We also make the following assumptions:

(1) The average annual salary of a teacher would be Rs. 2,100 in 1975-76 (one trained graduate teacher with an average annual salary of Rs. 3,000 for three primary school teachers with an average annual salary of Rs. 1,800), and Rs. 2,875 in 1985-86 (one graduate trained teacher with an average annual salary of Rs. 4,000 for three primary school teachers with an average annual salary of Rs. 2,500).

(2) The non-teacher costs would be 20 per cent of the teacher costs.

(3) The average pupil-teacher ratio would be 35 in both the years.

SII.16 The cost per pupil will be as given in Table SII.7.

SII.17 As 10 per cent of the schools have to be upgraded to optimum standards (i.e., to about double the cost per pupil), the cost per student would be Rs. 87.1 in 1975-76 and 119.4 in 1985-86.

SII.18 For part-time education, we have assumed that the cost per pupil per year will be Rs. 30 in 1975-76 and Rs. 50 in 1985-86.

TABLE SII.7 COST PER PUPIL AT HIGHER PRIMARY STAGE

|   | 1975-76 | 1985-86 |
|---|---------|---------|
| (1) Average annual salary of a teacher (Rs.)            | 2,100   | 2,875   |
| (2) Add 10 per cent for retirement benefits(Rs.)        | 210     | 288     |
| TOTAL (Teacher Costs) (Rs.)                             | 2,310   | 3,163   |
| (3) Non-teacher costs at 20 per cent of the above (Rs.) | 462     | 633     |

|                           |       |       |
|---------------------------|-------|-------|
| TOTAL COSTS (Rs.)         | 2,772 | 3,796 |
| (4) Pupil-Teacher ratio   | 35    | 35    |
| (5) Cost per pupil (Rs.). | 79.2  | 108.5 |

SII.19 The total costs will be as follows:

TABLE SII.8. TOTAL COST OF EDUCATION AT HIGHER PRIMARY STAGE

|                          | 1975-76   | 1985-86   |
|--------------------------|-----------|-----------|
| (1) Enrolment (in 000's) |           |           |
| Full-time                | 25,915    | 38,971    |
| Part-time                | 6,479     | 9,743     |
| TOTAL                    | 32,394    | 48,714    |
| (2) Costs (Rs. in 000's) |           |           |
| Full-time                | 2,257,197 | 4,653,137 |
| Part-time                | 194,370   | 487,150   |
| TOTAL COSTS              | 2,451,567 | 5,140,287 |

SII.20 The total estimated recurring expenditure on the first level of education in 1975-76 and 1985-86 would, therefore, be as in Table SII.9.

SII.21 It will be seen that the cost proposed above are extremely austere. The pupil-teacher ratios we have proposed will be objected to by many. There is no provision made here for midday meals, for maintaining school health services, for free supply of school uniforms, and yet, the total cost required for this programme goes much beyond our proposed target in 1975-76, although it remains within manageable limits thereof by 1985-86. This is one of the reasons why we have proposed that programme of addition of one year to the school stage should be mainly postponed to the second decade.

TABLE SII.9. TOTAL ESTIMATED RECURRING EXPENDITURE ON THE FIRST LEVEL OF EDUCATION

|   | 1975-76<br>(Rs.in 000's) | 1985-86<br>(Rs. in 000's) |
|---|--------------------------|---------------------------|
| (1) Pre-primary   | 236,956                  | 488,531                   |
| (2) Lower primary   | 3,749,220                | 6,129,616                 |
| (3) Higher primary  | 2,451,567                | 5,140,287                 |
| TOTAL   | 6,437,743                | 11,758,434                |
| (4) Percentage of total anticipated expenditure of Rs. 15,562 million in 1975-76 and of Rs. 40,364 million in 1985-86 | 41.4                     | 29.1                      |

### LOWER SECONDARY EDUCATION

SII.22 For the purpose of estimating costs we make the following assumptions:

(1) Ninety per cent of the teachers would be trained graduates whose average annual salary will be Rs. 3,000 in 1975-76 and Rs. 4,000 in 1985-86. The remaining 10 per cent of the teachers would have postgraduate qualifications-their average annual salary would be Rs. 4,500 in 1975-76 and Rs. 5,500 in 1985-86.

(2) The pupil-teacher ratio will be 25.

(3) Non-teacher costs will be at the rate of one-third of the teacher costs.

SII.23 On these assumptions the cost per pupil will be as follows:

TABLE SII.10. COST PER PUPIL AT THE LOWER SECONDARY STAGE

|  | 1975-76 | 1985-86 |
|--|---------|---------|
| (1) Average annual salary of a teacher (Rs.) | 3,150   | 4,150   |
| (2) Add 10% for retirement benefits (Rs.)    | 315     | 415     |

|  |       |       |
|--|-------|-------|
| TOTAL (Teacher Costs) (Rs.)                          | 3,465 | 4,565 |
| (3) Non-teacher costs @ one-third on the above (Rs.) | 1,155 | 1,522 |
| TOTAL COST (Rs.)                                     | 4,620 | 6,087 |
| (4) Pupil-teacher ratio                              | 25    | 25    |
| (5) Cost per pupil (Rs.)                             | 184.8 | 243.5 |

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SII.24 As 10 per cent of the schools at this level are to be maintained at optimum standard (i.e., at about double the cost per student), the average cost per student at this stage will be Rs. 203.3 in 1975-76 and Rs. 267.9 in 1985-86.

SII.25 We have suggested in Chapter VII (Vol. II) that 20 per cent of the enrolment will be in art-time education. In general education, the cost per student in such education has been assumed at Rs. 60 for 1975-76 and Rs. for 1985-86.

SII.26 We have further assumed that the enrolment in vocational education will be 6.4 per cent by 1975-76 and 20 per cent by 1985-86 and the cost will be Rs. 500 in 1975-76 and Rs. 600 in 1985-86.

SII.27 About 20 per cent of the enrolment in vocational education would also be on a part-time basis. The cost per student in such education has been assumed at Rs. 200 by 1975-76 and Rs. 250 by 1985- 86.

SII.28 On these assumptions, the total cost of education at this stage will be as given Table SII.11.

### **HIGHER SECONDARY EDUCATION**

SII.29 We have recommended in Chapter III (Vol. I), that the duration of this stage should be one year till about 1975-76 and that in the following decade, it should be raised to two years. We have also recommended in Chapter VII (Vol. II), that 50 per cent of the enrolment at this stage should be in vocational courses and that 25 per cent of the total enrolment should be on a part-time basis.

SII.30 On the basis of the salary scales recommended by us, the average annual salary of a teacher at this stage would be Rs. 4,500 in 1975-76 and Rs. 5,500 in 1985-86.

SII.31 The non-teacher costs will be one-third of the teacher costs.

SII.32 The pupil-teacher ratio will be 20 : 1.

SII.33 On these assumptions, the cost per student in higher secondary education (general) would be as given in Table SII.12.

SII.34 As 10 per cent of these institutions are to be upgraded to optimum standards (i.e., about double the cost per pupil), the cost per student would be Rs. 363.0 in 1975-76 and Rs. 443.7 in 1985-86.

SII.35 We have also assumed that the cost in the vocational courses will be Rs. 700 in 1975-76 and Rs. 800 in 1985-86.

SII.36 The costs in part-time education (general) would be Rs. 120 in 1975-76 and Rs. 160 in 1985-86. In vocational courses, these costs have been assumed at Rs. 300 in 1975-76 and Rs. 350 in 1985-86.

SII.37 On these assumptions, the cost of education at this stage will be as given in Table SII.13.

TABLE SII.11. TOTAL COST OF EDUCATION AT THE LOWER SECONDARY STAGE

|                             | 1975-76   | 1985-86   |
|-----------------------------|-----------|-----------|
| 1. Enrolment (in 000's)     |           |           |
| <b>General Education</b>    |           |           |
| Full-time                   | 9,494     | 15,596    |
| Part-time                   | 2,373     | 3,899     |
| TOTAL                       | 11,8671   | 9,495     |
| <b>Vocational Education</b> |           |           |
| Full-time                   | 654       | 3,898     |
| Part-time                   | 164       | 975       |
| TOTAL                       | 818       | 4,873     |
| 2. Costs (Rs. in 000's)     |           |           |
| <b>General Education</b>    |           |           |
| Full-time                   | 1,930,130 | 4,178,168 |

|                             |           |           |
|-----------------------------|-----------|-----------|
| Part-time                   | 142,380   | 311,920   |
| TOTAL                       | 2,072,510 | 4,490,088 |
| <b>Vocational Education</b> |           |           |
| Full-time                   | 327,000   | 2,338,800 |
| Part-time                   | 32,800    | 243,730   |
| TOTAL                       | 359,800   | 2,582,550 |
| TOTAL (Lower Secondary)     | 2,432,310 | 7,072,638 |

TABLE SII.12. COST PER STUDENT AT HIGHER SECONDARY STAGE

|  | 1975-76 | 1985-86 |
|--|---------|---------|
| (1) Average annual salaries of teachers (Rs.)                | 4,500   | 5,500   |
| (2) Add 10 per cent for retirement benefits (Rs.)            | 450     | 550     |
| TOTAL (Teacher Costs) (Rs.)                                  | 4,950   | 6,050   |
| (3) Add non-teacher costs @ 1/3rd of the teacher costs (Rs.) | 1,650   | 2,017   |
| TOTAL (Rs.)  | 6,600   | 8,067   |
| (4) Pupil-teacher ratio                                      | 20      | 20      |
| (5) Cost per pupil (Rs.)                                     | 330.0   | 403.4   |



TABLE SII.13. COST OF EDUCATION AT HIGHER SECONDARY STAGE

|                                | 1975-76   | 1985-86   |
|--------------------------------|-----------|-----------|
| (1) Enrolment (in 000's)       |           |           |
| <b>General Education</b>       |           |           |
| Full-time                      | 1,212     | 2,578     |
| Part-time                      | 404       | 859       |
| TOTAL                          | 1,616     | 3,437     |
| <b>Vocational Education</b>    |           |           |
| Full-time                      | 1,030     | 2,577     |
| Part-time                      | 343       | 859       |
| TOTAL                          | 1,373     | 3,436     |
| (2) Costs (Rs. in 000's)       |           |           |
| <b>General Education</b>       |           |           |
| Full-time                      | 439,956   | 1,143,859 |
| Part-time                      | 48,480    | 137,440   |
| TOTAL                          | 488,436   | 1,281,299 |
| <b>Vocational Education</b>    |           |           |
| Full-time                      | 721,000   | 2,061,600 |
| Part-time                      | 102,900   | 300,650   |
| TOTAL                          | 823,900   | 2,362,250 |
| GRAND TOTAL (Higher Secondary) | 1,312,336 | 3,643,549 |

## INDIRECT EXPENDITURE ON SCHOOL EDUCATION

SII.38 Direction and Inspection. The expenditure on direction and inspection is now 1.9 per cent of the total. In order to give effect to the various recommendations we have made to strengthen administration and supervision, including in-service education of teachers, we propose to increase this expenditure to 2.5 per cent of the total in 1975-76 and to 4 per cent in 1985-86.

SII.39 We have made the following assumptions regarding scholarships at the school stage:

(1) At the higher primary stage, 2.5 per cent of the students would get scholarships in 1975-76 and 5 per cent in 1985-86. The average amount of the scholarships would be Rs. 60 per annum. The bulk of scholarships will be needed for meeting indirect costs, but a few larger scholarships will be provided to cover hostel charges also.

(2) In general secondary education, both lower and higher, 5 per cent of the students will receive scholarships by 1975-76 and 10 per cent by 1985-86. The average amount of the scholarship will be Rs. 150 per year. As said earlier, some of these scholarships would cover indirect costs and others would cover hostel charges also.

(3) In vocational secondary education 30 per cent of the students will get scholarships by 1975-76 and 50 per cent by 1985-86. The amount of the scholarships should be Rs. 300 per year at the lower secondary stage and Rs. 400 per year at the higher secondary stage.

SII.40 On these assumptions, the cost of the scholarships programme would be as follows:

TABLE SII.14. ESTIMATED COSTS ON SCHOLARSHIPS AND STIPENDS AT SCHOOL STAGE (1975-76 and 1983-86)

| Type of education | Total<br>Enroll-<br>ment in<br>full-time<br>courses | % of<br>students<br>getting<br>scholar-<br>ships | Total<br>number<br>of scholar-<br>ships | Average<br>annual<br>value of<br>scholar-<br>ship | Total<br>cost on<br>scholar-<br>ships |
|-------------------|---|--|---|---|---------------------------------------|
|                   | (000's)   |  | (000's)                                 | Rs.   | (Rs. in 000's)                        |
| 1975-76           |   |  |   |   |                                       |
| Higher Primary    | 25,915  | 2.5  | 648                                     | 60  | 38,880                                |
| Lower Secondary:  |   |  |   |   |                                       |

|                   |        |      |       |     |           |
|-------------------|--------|------|-------|-----|-----------|
| General           | 9,494  | 5.0  | 475   | 150 | 71,250    |
| Vocational        | 654    | 30.0 | 196   | 300 | 58,800    |
| Higher Secondary  |        |      |       |     |           |
| General           | 1,212  | 5.0  | 61    | 150 | 9,150     |
| Vocational        | 1,030  | 30.0 | 309   | 400 | 123,600   |
| TOTAL             | 38,305 |      | 1,689 |     | 301,680   |
| 1985-86           |        |      |       |     |           |
| Higher Primary    | 38,971 | 5.0  | 1,949 | 60  | 116,940   |
| Lower Secondary:  |        |      |       |     |           |
| General           | 15,596 | 10.0 | 1,560 | 150 | 234,000   |
| Vocational        | 3,899  | 50.0 | 1,950 | 300 | 585,000   |
| Higher Secondary: |        |      |       |     |           |
| General           | 2,578  | 10.0 | 258   | 150 | 38,700    |
| Vocational        | 2,577  | 50.0 | 1,289 | 400 | 515,600   |
| TOTAL             | 63,621 |      | 7,006 |     | 1,490,240 |

SII.41 Buildings. We have made an ad hoc provision of 2.5 per cent for buildings. It is less than the present allocation, although the amount, in absolute terms, will be much bigger. This highlights the need to economize on buildings.

SII.42 Total Expenditure. We can now sum up the total expenditure on school education-recurring and capital-as anticipated for the years 1975-76 and 1985-86. This has been done in Table SII.15.

SII.43 The implications of these estimates in terms of teachers' salaries, pupil-teacher ratios, levels of non-teacher expenditure, etc., have been given (along with comparisons for earlier years) in Table SII.16.

TABLE SII.15 EXPENDITURE ON SCHOOL EDUCATION (1975-76 and 1985-86)

|                                 | Total expenditure<br>(Rs. in 000's) |            | Percentage of total<br>expenditure |         |
|---------------------------------|-------------------------------------|------------|------------------------------------|---------|
|                                 | 1975-76                             | 1985-86    | 1975-76                            | 1985-86 |
| <b>(1) Recurring (Direct)</b>   |                                     |            |                                    |         |
| Pre-primary                     | 236,956                             | 488,531    | 1.5                                | 1.2     |
| Lower Primary                   | 3,749,220                           | 6,129,616  | 24.1                               | 15.2    |
| Higher Primary                  | 2,451,567                           | 5,140,287  | 15.8                               | 12.7    |
| TOTAL                           | 6,437,743                           | 11,758,434 | 41.4                               | 29.1    |
| Lower Secondary:                |                                     |            |                                    |         |
| General                         | 2,072,510                           | 4,490,088  | 13.3                               | 11.1    |
| Vocational                      | 359,800                             | 2,582,550  | 2.3                                | 6.4     |
| TOTAL                           | 2,432,310                           | 7,072,638  | 15.6                               | 17.5    |
| Higher Secondary:               |                                     |            |                                    |         |
| General                         | 488,436                             | 1,281,299  | 3.1                                | 3.2     |
| Vocational                      | 823,900                             | 2,362,250  | 5.3                                | 5.8     |
| TOTAL                           | 1,312,336                           | 3,643,549  | 8.4                                | 9.0     |
| TOTAL RECURRING<br>(Direct)     | 10,182,389                          | 22,474,621 | 65.4                               | 55.7    |
| <b>(2) Recurring (Indirect)</b> |                                     |            |                                    |         |
| Direction and<br>inspection     | 389,050                             | 1,614,560  | 2.5                                | 4.0     |
| Scholarships                    | 301,680                             | 1,490,240  | 1.9                                | 3.7     |
| TOTAL                           | 690,730                             | 3,104,800  | 4.4                                | 7.7     |

|  |                   |                   |             |             |
|--|-------------------|-------------------|-------------|-------------|
| <b>(3) Recurring (Direct and Indirect)</b> | 10,873,119        | 25,579,421        | 69.9        | 63.4        |
| <b>(4) Capital</b>                         |                   |                   |             |             |
| Buildings and equipment                    | 389,050           | 1,008,890         | 2.5         | 2.5         |
| <b>(5) TOTAL (School Education)</b>        | <b>11,262,169</b> | <b>26,588,311</b> | <b>72.4</b> | <b>65.9</b> |

N.B. Totals do not tally due to rounding of figures.

TABLE SII.16. AVERAGE ANNUAL COST PER PUPIL (1950-51 to 1985-86)

| Year                           | Average annual salary per teacher | Number of pupils per teacher | Percentage of non-teacher costs to teacher costs | Average annual cost  |                          | Total |
|--------------------------------|-----------------------------------|------------------------------|--|----------------------|--------------------------|-------|
|                                |                                   |                              |  | Due to teacher costs | Due to non-teacher costs |       |
|                                | Rs.                               |                              |  | Rs.                  | Rs.                      | Rs.   |
| <b>Pre-primary Education</b>   |                                   |                              |  |                      |                          |       |
| 1950-51                        | 914                               | 25                           | 51.3   | 37                   | 19                       | 55    |
| 1965-66                        | 1,000                             | 31                           | 54.3   | 35                   | 20                       | 55    |
| 1975-76                        | 1,800                             | 40                           | 50.0   | 50                   | 25                       | 74    |
| 1985-86                        | 2,500                             | 40                           | 50.0   | 69                   | 34                       | 103   |
| <b>Lower Primary Education</b> |                                   |                              |  |                      |                          |       |
| 1950-51                        | 545                               | 34                           | 24.6   | 16                   | 4                        | 20    |
| 1965-66                        | 1,046                             | 38                           | 11.1   | 27                   | 3                        | 30    |
| 1975-76                        | 1,800                             | 50                           | 20.2   | 43                   | 9                        | 52    |
| 1985-86                        | 2,500                             | 45                           | 19.6   | 67                   | 13                       | 80    |

**Higher Primary Education**

|         |       |    |      |    |    |     |
|---------|-------|----|------|----|----|-----|
| 1950-51 | 682   | 24 | 32.0 | 28 | 9  | 37  |
| 1965-66 | 1,087 | 31 | 12.4 | 40 | 5  | 45  |
| 1975-76 | 2,100 | 35 | 20.0 | 73 | 14 | 87  |
| 1985-86 | 2,875 | 35 | 20.0 | 99 | 20 | 119 |

**Lower Secondary Education (General)**

|          |       |    |      |     |    |     |
|----------|-------|----|------|-----|----|-----|
| 1950-51* | 1,258 | 25 | 44.8 | 50  | 23 | 73  |
| 1965-66* | 1,858 | 25 | 37.0 | 78  | 29 | 107 |
| 1975-76  | 3,150 | 25 | 33.3 | 152 | 51 | 203 |
| 1985-86  | 4,150 | 25 | 33.3 | 201 | 67 | 268 |

**Lower Secondary Education (Vocational)**

|           |       |    |       |     |     |     |
|-----------|-------|----|-------|-----|-----|-----|
| 1950-51** | 1,705 | 16 | 86.8  | 106 | 92  | 197 |
| 1965-66** | 2,887 | 15 | 100.0 | 208 | 208 | 417 |
| 1975-76   | ..    | .. | ..    | ..  | ..  | 500 |
| 1985-86   | ..    | .. | ..    | ..  | ..  | 600 |

**Higher Secondary Education (General)**

|         |       |    |      |     |     |     |
|---------|-------|----|------|-----|-----|-----|
| 1975-76 | 4,500 | 20 | 33.3 | 272 | 91  | 363 |
| 1985-86 | 5,500 | 20 | 33.3 | 333 | 111 | 444 |

**Higher Secondary Education (Vocational)**

|         |    |    |    |    |    |     |
|---------|----|----|----|----|----|-----|
| 1975-76 | .. | .. | .. | .. | .. | 700 |
| 1985-86 | .. | .. | .. | .. | .. | 800 |

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\*High/Higher secondary schools. \*\*All types of vocational and technical schools. Notes-1. The costs for the years 1950-51 and 1965-66 are at current prices and those for 1975-76 and 1985-86 are at constant prices of 1965-66.

2. Totals do not tally on account of rounding of figures.

### SUPPLEMENT NOTE III

#### TENTATIVE ESTIMATES OF EXPENDITURE ON THE DEVELOPMENT OF HIGHER EDUCATION (1965-85)

SIII.01 We have recommended in Chapter XII (Vol. III) that the admission in higher education should be on selective basis and the expansion should be related to manpower needs. We have recommended that more emphasis should be laid on professional education and that quality of education should be improved. We have also recommended that 30 per cent of the enrolment both at the undergraduate and postgraduate stages should be in part-time courses.

**SIII.02 Undergraduate Education.** On the basis of salary scales recommended by us, the average annual salary of a teacher at this stage would be Rs. 6,000 in 1975-76 and Rs. 7,500 in 1985-86. The corresponding salary of a teacher in arts and science colleges in 1965-66 was Rs. 4,000.

SIII.03 The lion-teacher costs will be two-thirds of the teacher costs.

SIII.04 The pupil-teacher ratio will be 15 : 1.

SIII.05 On these assumptions, the cost per student at undergraduate level (.excluding science and professional courses) will be as follows:

TABLE SIII.1. COST PER STUDENT AT UNDERGRADUATE LEVEL

|   | 1975-76 | 1985-86 |
|---|---------|---------|
| (1) Average annual salary of a teacher (Rs.)            | 6,000   | 7,500   |
| (2) Add 10 per cent for retirement benefits (Rs.)       | 600     | 750     |
| TOTAL (Teacher costs) (Rs.)                             | 6,600   | 8,250   |
| (3) Add non-teacher costs @2/3 of teacher costs (Rs.) . | 4,400   | 5,500   |
| TOTAL (Rs.)   | 11,000  | 13,750  |
| (4) Pupil-teacher ratio                                 | 15      | 15      |
| (5) Cost per pupil (Rs.)                                | 733.3   | 916.7   |

SIII.06 For costing purposes we make the following assumptions:

(1) The enrolment in arts and commerce courses will be 40 per cent of the total. Of this, 70 per cent would be on a full-time basis and the cost estimated at the above rates. The remaining 30 per cent will be on a part-time basis and costed at Rs. 300 in 1975-76 and Rs. 400 in 1985-86.

(2) Sixty per cent of the total enrolment would be in professional and science courses and in quality institutions in the arts and commerce courses. The cost per pupil will be roughly double that for the ordinary courses for arts and commerce, i.e. at Rs. 1,500 per student in 1975-76 and Rs. 2,000 per student in 1985-86. It must be noted that these are 'average' costs and that in quality and pace-setting institutions, the cost might be much higher, i.e. about as much as 10 times that in the ordinary institutions.

(3) Of the total enrolment in professional and science courses given in (2) above, 30 per cent would be in part-time courses. This will cost Rs. 750 in 1975-76 and Rs. 1,000 in 1985-86.

SIII.07 On the above assumptions, the recurring cost of the programme at the undergraduate stage in 1975-76 and 1985-86 will be as given in Table below. The details of the enrolments assumed here have been discussed earlier in Chapter XII.

TABLE SIII.2 RECURRING COST OF THE PROGRAMME AT THE UNDERGRADUATE STAGE

| (1) Enrolment (in 000's)                | 1975-76 | 1985-86 |
|---|---------|---------|
| <b>Arts and Commerce</b>                |         |         |
| Full-time                               | 526     | 896     |
| Part-time                               | 226     | 384     |
| TOTAL                                   | 752     | 1,280   |
| <b>Science and Vocational Education</b> |         |         |
| Full-time                               | 790     | 1,344   |
| Part-time                               | 339     | 576     |
| TOTAL                                   | 1,129   | 1,920   |



(2) Cost (Rs. in 000's)

**Arts and Commerce**

|           |         |         |
|-----------|---------|---------|
| Full-time | 385,716 | 821,363 |
| Part-time | 67,800  | 153,600 |
| TOTAL     | 453,516 | 974,963 |

**Science and Vocational Education**

|             |           |           |
|-------------|-----------|-----------|
| Full-time   | 1,185,000 | 2,688,000 |
| Part-time   | 254,250   | 576,000   |
| TOTAL       | 1,439,250 | 3,264,000 |
| GRAND TOTAL | 1,892,766 | 4,238,963 |

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**SIII.08 Post SIII.08 Postgraduate Education.** At the postgraduate stage, costing becomes even more difficult because the range of variation is very large—from course to course and from institution to institution. For purposes of these estimates, we have made the following assumptions:

(1) 40 per cent of the total enrolment at the postgraduate stage would be in courses of arts and commerce. Of these, 30 per cent would be in correspondence and part-time education.

(2) The remaining 60 per cent of the enrolment would be in science and professional courses. Of this also, 30 per cent would be in part-time and correspondence education.

(3) The 'average' cost per student in courses in arts and commerce has been assumed at Rs. 3,000 for 1975-76 and Rs. 3,600 in 1985-86. In part-time courses, the cost assumed is Rs. 900 in 1975-76 and Rs. 1,200 in 1985-86.

(4) In courses of science and professional education the 'average' cost per student has been assumed at Rs. 5,000 in 1975-76 and Rs. 6,000 in 1985-86. In part-time courses the cost is assumed at Rs. 2,500 in 1975-76 and Rs. 3,000 in 1985-86.

SIII.09 On these assumptions, the estimated expenditure on post-graduate education in 1975-76 and 1985-86 would be as shown in the table below. The estimates regarding enrolment have been discussed earlier in Chapter XII.

TABLE SIII.3 ESTIMATED EXPENDITURE ON POSTGRADUATE EDUCATION

|   |           |           |
|---|-----------|-----------|
| (1) Enrolment (in 000's).               | 1975-76   | 1985-86   |
| <b>Arts and Commerce</b>                |           |           |
| Full-time.                              | 90        | 269       |
| Part-time.                              | 38        | 115       |
| TOTAL                                   | 128       | 384       |
| <b>Science and Vocational Education</b> |           |           |
| Full-time.                              | 135       | 403       |
| Part-time.                              | 581       | 73        |
| TOTAL                                   | 193       | 576       |
| (2) Cost (Rs. in 000's)                 |           |           |
| <b>Arts and Commerce</b>                |           |           |
| Full-time                               | 270,000   | 968,400   |
| Part-time                               | 34,200    | 138,000   |
| TOTAL                                   | 304,200   | 1,106,400 |
| <b>Science and Vocational Education</b> |           |           |
| Full-time                               | 675,000   | 2,418,000 |
| Part-time                               | 145,000   | 519,000   |
| TOTAL                                   | 820,000   | 2,937,000 |
| GRAND TOTAL                             | 1,124,200 | 4,043,400 |

### SCHOLARSHIPS

SIII.10 For costing scholarships, we have made the following assumptions:

(1) in courses in arts and commerce at the undergraduate stage, the average value of a scholarship will be Rs. 75 per month and it would be awarded to 15 per cent of the full-time enrolment in 1975-76 and to 25 per cent of that in 1985-86.

(2) in courses in science and professional education at the undergraduate stage, the value of the scholarship will be Rs. 125 per month and it will be awarded to 30 per cent of the enrolment in full-time courses in 1975-76 and to 50 per cent of that in 1985-86.

(3) At the postgraduate stage, the average value of the scholarship will be Rs. 300 per month and it would be awarded to 25 per cent of the students in full-time education in 1975-76 and to 50 per cent of those in 1985-86.

TABLE SIII.4 ESTIMATED COSTS ON SCHOLARSHIPS/STIPENDS TO STUDENTS IN HIGHER EDUCATION (1975-76 and 1985-86)

| Type of education      | Total Enrollment in full-time courses | % of students getting scholarships | Total number of scholarships | Average annual value of scholarship | Total cost on scholarships |
|------------------------|---------------------------------------|------------------------------------|------------------------------|-------------------------------------|----------------------------|
|                        | (000's)                               |                                    | (000's)                      | Rs.                                 | (Rs. in 000's)             |
| <b>1975-76</b>         |                                       |                                    |                              |                                     |                            |
| <b>Undergraduate</b>   |                                       |                                    |                              |                                     |                            |
| Arts and Commerce      | 526                                   | 15                                 | 79                           | 900                                 | 71,100                     |
| Science and Vocational | 790                                   | 30                                 | 237                          | 1,500                               | 355,500                    |
| Postgraduate           | 224                                   | 25                                 | 56                           | 3,600                               | 201,600                    |
| <b>TOTAL</b>           | <b>1,540</b>                          |                                    |                              | <b>372</b>                          | <b>8,200</b>               |
| <b>1985-86</b>         |                                       |                                    |                              |                                     |                            |
| <b>Undergraduate</b>   |                                       |                                    |                              |                                     |                            |
| Arts and Commerce      | 896                                   | 25                                 | 224                          | 900                                 | 201,600                    |
| Science and Vocational | 1,344                                 | 50                                 | 672                          | 1,500                               | 1,005,000                  |
| Postgraduate           | 672                                   | 50                                 | 336                          | 3,600                               | 1,209,600                  |
| <b>TOTAL</b>           | <b>2,912</b>                          |                                    |                              | <b>1,232</b>                        | <b>2,416,200</b>           |

SIII.11 On these assumptions, the total expenditure on the pro- gramme would be as shown in Table SIII.4.

SIII.12 In the light of the above discussions, the total estimated cost on higher education in 1975-76 and 1985-86 will be as given in Table SIII.5 below. Its implications in terms of average annual salaries of teachers, pupil-teacher ratios, level of non- teacher costs and cost per student are given in Table SIII.6.

TABLE SIII.5 EXPENDITURE ON HIGHER EDUCATION (1975-76 to 1985-86)

| Type of education                                    | Total expenditure<br>(Rs. in 000's) |            | Percentage to total<br>expenditure |         |
|--|-------------------------------------|------------|------------------------------------|---------|
|  | 1975-76                             | 1985-86    | 1975-76                            | 1985-86 |
| <b>(1) Recurring (Direct)</b>                        |                                     |            |                                    |         |
| <b>Undergraduate</b>                                 |                                     |            |                                    |         |
| Arts and Commerce                                    | 453,516                             | 974,963    | 2.9                                | 2.4     |
| Science and Vocational                               | 1,439,250                           | 3,264,000  | 9.3                                | 8.1     |
| TOTAL  | 1,892,766                           | 4,238,963  | 12.2                               | 10.5    |
| <b>Postgraduate</b>                                  |                                     |            |                                    |         |
| Arts and Commerce                                    | 304,200                             | 1,106,400  | 1.9                                | 2.7     |
| Science and Vocational                               | 820,000                             | 2,937,000  | 5.3                                | 7.3     |
| TOTAL  | 1,124,200                           | 4,043,400  | 7.21                               | 0.0     |
| TOTAL-Recurring (Direct)                             | 3,016,966                           | 8,282,363  | 19.4                               | 20.5    |
| <b>(2) Recurring (Indirect)</b>                      |                                     |            |                                    |         |
| Scholarships   | 628,200                             | 2,416,200  | 4.0                                | 6.0     |
| <b>(3) Total Recurring (Direct<br/>and Indirect)</b> |                                     |            |                                    |         |
|  | 3,645,166                           | 10,698,563 | 23.4                               | 26.5    |
| <b>(4) Capital</b>                                   |                                     |            |                                    |         |
| Buildings and<br>Equipment                           | 576,855                             | 2,673,486  | 3.7                                | 6.6     |
| TOTAL (Higher Education)                             | 4,222,021                           | 13,372,049 | 27.1                               | 33.1    |

TABLE SIII.6 AVERAGE ANNUAL COST PER PUPIL (1950-51 to 1985-86)

| Type of institution           | Average annual salary per | Number of pupils per teacher | Percentage of non-teacher costs | Average annual cost per pupil |                          | Total |
|-------------------------------|---------------------------|------------------------------|---------------------------------|-------------------------------|--------------------------|-------|
|                               |                           |                              |                                 | Due to teacher costs          | Due to non-teacher costs |       |
|                               | Rs.                       |                              |                                 | Rs.                           | Rs.                      | Rs.   |
| <b>Undergraduate</b>          |                           |                              |                                 |                               |                          |       |
| <b>Arts and Commerce</b>      |                           |                              |                                 |                               |                          |       |
| 1950-51*                      | 2,696                     | 20                           | 73.7                            | 133                           | 98                       | 231   |
| 1965-66*                      | 4,000                     | 20                           | 63.8                            | 200                           | 128                      | 328   |
| 1975-76                       | 6,000                     | 15                           | 66.7                            | 440                           | 293                      | 733   |
| 1985-86                       | 7,500                     | 15                           | 66.7                            | 550                           | 367                      | 917   |
| <b>Science and Vocational</b> |                           |                              |                                 |                               |                          |       |
| 1950-51**.                    | 3,948                     | 11                           | 118.1                           | 357                           | 422                      | 779   |
| 1965-66**.                    | 6,410                     | 11                           | 100.0                           | 583                           | 583                      | 1,167 |
| 1975-76                       | ..                        | ..                           | ..                              | ..                            | ..                       | 1,500 |
| 1985-86                       | ..                        | ..                           | ..                              | ..                            | ..                       | 2,000 |
| <b>Postgraduate</b>           |                           |                              |                                 |                               |                          |       |
| <b>Arts and Commerce</b>      |                           |                              |                                 |                               |                          |       |
| 1975-76                       | 10,000                    | 8                            | 118                             | 1,375                         | 1,625                    | 3,000 |
| 1985-86                       | 12,000                    | 8                            | 118                             | 1,650                         | 1,950                    | 3,600 |
| <b>Science and Vocational</b> |                           |                              |                                 |                               |                          |       |
| 1975-76                       | ..                        | ..                           | ..                              | ..                            | ..                       | 5,000 |
| 1985-86                       | ..                        | ..                           | ..                              | ..                            | ..                       | 6,000 |

\* All types of colleges for arts and science (Intermediate to postgraduate). \*\* All types of vocational/professional colleges.

## CHAPTER IV

### UNIT COSTS IN HIGHER EDUCATION

SIV.01 Considering the importance of unit cost studies in higher education, where the provision of educational facilities is much more expensive than at other levels of education, the Education Commission requested a few universities to investigate the per student expenditure in higher education under their Jurisdiction. Accordingly, twelve universities, namely, Andhra, Annamalai, Bhagalpur, Bombay, Jiwaji, Kurukshetra, Nagpur, Osmania, Poona, Rajasthan, Sardar Vallabhbhai and Utkal, conducted such studies.

SIV.02 Being a comparatively new field, where not much systematic work has been done so far in our country, these studies throw up interesting results. These relate to both undergraduate and postgraduate courses in various faculties in general as well as in professional education. The results have been summarized and are given in Tables SIVA to SIV.5. These deal with costs in university teaching departments and university/constituent colleges and affiliated colleges.

SIV.03 A glance at these statements is enough to show how wide the variations in the costs are: while some variation is, no doubt, due to the differences in the methodology and the scope of these studies, a good deal of the variation may be due to the differences in the levels of the facilities and services provided in these institutions which in turn depend on such variable factors as salaries of teachers, student-teacher ratio, library, laboratory and other facilities provided, besides the capital cost.

SIV.04 In order that these studies are more useful, it is necessary that these be conducted on a uniform pattern based on agreed concepts and definitions. We feel that the UGC should assist some universities to conduct such investigations periodically on the basis of standardized techniques

SV.1. COST PER STUDENT IN UNIVERSITIES (UNIVERSITY TEACHING DEPARTMENTS, FACULTIES AND UNIVERSITY  
CONSTITUENT COLLEGES)

|                                      | Andhra | Annasalai | Bhagalpur | Jiwaji | Kurukshetra | Nagpur | Osmania | Poona | Rajasthan | Sardar<br>Vallabh | Utkal |
|--------------------------------------|--------|-----------|-----------|--------|-------------|--------|---------|-------|-----------|-------------------|-------|
| <i>Postgraduate Courses</i>          | Rs.    | Rs.       | Rs.       | Rs.    | Rs.         | Rs.    | Rs.     | Rs.   | Rs.       | Rs.               | Rs.   |
| Arts . . . . .                       | 998    | 1,861     | 490       | 241    | ..          | 736    | 922     | 1,684 | 1,681     | 1,148             | 1,226 |
| Commerce . . . . .                   | 998    | ..        | 490       | 262    | ..          | ..     | 847     | ..    | ..        | 650               | 1,256 |
| Science . . . . .                    | ..     | 1,851     | 5,011     | 397**  | 2,208       | 2,589  | ..      | 2,752 | 5,251     | 3,220             | ..    |
| Social Sciences . . . . .            | ..     | ..        | ..        | 261    | 1,666       | ..     | ..      | ..    | ..        | ..                | ..    |
| Languages . . . . .                  | ..     | ..        | ..        | ..     | 1,776       | ..     | ..      | ..    | ..        | ..                | ..    |
| Vedic Studies . . . . .              | ..     | ..        | ..        | ..     | 2,608       | ..     | ..      | ..    | ..        | ..                | ..    |
| Engineering . . . . .                | ..     | 2,424     | ..        | ..     | ..          | ..     | 2,116*  | ..    | ..        | ..                | ..    |
| Education . . . . .                  | ..     | 8,566     | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Oriental Studies . . . . .           | ..     | 13,119    | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Fine Arts . . . . .                  | ..     | ..        | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Agriculture . . . . .                | ..     | 5,432     | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Law . . . . .                        | ..     | ..        | ..        | 358    | ..          | ..     | ..      | ..    | 966       | ..                | ..    |
| <i>Undergraduate Courses</i>         |        |           |           |        |             |        |         |       |           |                   |       |
| Arts . . . . .                       | ..     | 729       | 409       | 219    | 1,170       | ..     | ..      | ..    | 552       | 308               | ..    |
| Commerce . . . . .                   | ..     | ..        | ..        | 278    | ..          | ..     | ..      | ..    | ..        | 434               | ..    |
| Science . . . . .                    | ..     | 586       | 489       | ..     | 1,463       | ..     | ..      | ..    | 599       | 372               | ..    |
| Engineering and Technology . . . . . | ..     | 1,045     | ..        | ..     | ..          | ..     | ..      | 1,525 | ..        | 1,574             | 1,358 |
| Education . . . . .                  | ..     | 448       | ..        | ..     | ..          | ..     | ..      | 725   | ..        | ..                | ..    |
| Oriental Studies . . . . .           | ..     | 783       | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Fine Arts . . . . .                  | ..     | 1,229     | ..        | ..     | ..          | ..     | ..      | ..    | ..        | ..                | ..    |
| Agriculture . . . . .                | ..     | 1,183     | ..        | ..     | ..          | ..     | ..      | ..    | ..        | 824               | ..    |
| Law . . . . .                        | ..     | ..        | ..        | 117    | ..          | ..     | ..      | 302   | ..        | ..                | ..    |

\*Science and technology.

\*\*Average of science subjects.

UNIT COSTS IN HIGHER EDUCATION 929

TABLE SIV.2 BOMBAY UNIVERSITY

(a) Cost Per Student its Postgraduate Departments (1963-64)

| Department              | Instruction | Instruction including research |
|-------------------------|-------------|--------------------------------|
|                         | Rs.         | Rs.                            |
| 1. Economics            | 962         | 1,460                          |
| 2. Civics and Politics  | 495         | 534                            |
| 3. Business Management  | 1,294       | 1,244                          |
| 4. Sociology            | 613         | 688                            |
| 5. English              | 1,410       | 1,394                          |
| 6. Sanskrit             | 2,116       | 2,194                          |
| 7. Mathematics          | 1,550       | 1,519                          |
| 8. Applied Psychology   | 1,926       | 1,816                          |
| 9. Statistics           | 1,483       | 1,470                          |
| 10. Law                 | 416         | 436                            |
| 11. Chemical Technology | 2,665       | 2,569                          |

(b) Cost Per Student in Colleges

| Year    | Com-<br>merce | Train-<br>ing | Law | Arts<br>&<br>Science | Science | Engi-<br>neering | Medicine | Dentis-<br>try |
|---------|---------------|---------------|-----|----------------------|---------|------------------|----------|----------------|
|         | Rs.           | Rs.           | Rs. | Rs.                  | Rs.     | Rs.              | Rs.      | Rs.            |
| 1949-50 | 226           | 1,060         | 107 | 350                  | 1,361   | 2,092            | 879      | 553            |
| 1950-51 | 212           | 1,063         | 162 | 272                  | 1,858   | 1,000            | 726      | 888            |



|         |     |     |     |     |       |       |       |       |
|---------|-----|-----|-----|-----|-------|-------|-------|-------|
| 1951-52 | 246 | 970 | 146 | 312 | 1,333 | 574   | 816   | 897   |
| 1952-53 | 282 | 972 | 156 | 310 | 1,291 | 1,077 | 923   | 913   |
| 1953-54 | 156 | 815 | 122 | 298 | 1,192 | 833   | 1,037 | 814   |
| 1954-55 | 171 | 677 | 149 | 297 | ..    | 1,260 | ..    | ..    |
| 1955-56 | 177 | 428 | 160 | 298 | 1,384 | 1,205 | 1,216 | 1,591 |
| 1956-57 | 148 | 540 | 162 | 284 | 1,330 | 1,203 | 1,248 | 1,570 |
| 1957-58 | 168 | 602 | 164 | 302 | 1,696 | 1,241 | 1,342 | 1,671 |
| 1958-59 | 179 | 707 | 162 | 285 | 1,603 | 1,314 | 1,725 | 1,485 |
| 1959-60 | 172 | 787 | 171 | 327 | 1,543 | 1,190 | 1,973 | 1,835 |
| 1960-61 | 253 | 815 | 166 | 351 | 1,616 | 1,535 | 2,033 | 2,005 |
| 1961-62 | 347 | 872 | 173 | 359 | 1,453 | 2,359 | 1,652 | 2,281 |
| 1962-63 | 317 | 744 | 208 | 384 | 1,643 | 1,316 | 1,693 | 2,782 |
| 1963-64 | 307 | 845 | 205 | 431 | 1,497 | 1,194 | 2,155 | 2,767 |

TABLE SIV.3 NAGPUR UNIVERSITY

(a) Cost Per Student in Undergraduate Institutions, 1964-65

| Institution   | Cost per student<br>Rs. |
|---|-------------------------|
| 1. College of Arts (Smt. Binzani M. M. College)                       | 433                     |
| 2. College of Science (M. M. College of Science)                      | 450                     |
| 3. Institute of Technology (Laxminarayan Institute of Technology) (a) | 1,857                   |
| 4. College of Arts & Science (Hislop College) (b)                     | 497                     |
| 5. College of Arts, Science & Commerce (Dhanwate National College)    | 222                     |

(a) The institute has a very small enrolment for the master's degree, so that practically it may be treated as an undergraduate institution.

(b) This College has only one postgraduate department (sociology), the expenditure on which has been deducted from the total expenditure. It has been treated as an undergraduate institution combining arts and science.

(b) Cost Per Student in Colleges with Undergraduate and Postgraduate Sections, 1964-65

| Institution  | Cost per student<br>Rs. |
|--|-------------------------|
| 1. College of Commerce<br>(G.S. College of Commerce and Economics, Nagpur) |                         |
| A. Undergraduate Section   | 281                     |
| B. Postgraduate Section  | 360                     |
| 2. College of Agriculture<br>(Government College of Agriculture, Nagpur)   |                         |
| A. Undergraduate Section   | 873                     |
| B. Postgraduate Section  | 1,613                   |

TABLE SIV.4 OSMANIA UNIVERSITY

cost Per Student in colleges (1963-64)

| College  | Cost per student<br>R.S. |
|--|--------------------------|
| <b>(A) University and Constituent Colleges</b> |                          |
| 1. University College of Science               | 1,027                    |
| 2. University College of Arts & Commerce       | 775                      |
| 3. Evening College, Secunderabad               | 687                      |
| 4. Nizam College                               | 681                      |

|   |     |
|---|-----|
| 5. Saifabad Science College             | 637 |
| 6. Women's College                      | 612 |
| 7. Arts & Science College, Secunderabad | 564 |
| 8. City Science College                 | 453 |
| 9. Arts and Science College, Warangal   | 404 |
| 10. Hyderabad Evening College           | 329 |

**(B) Private Colleges**

|   |     |
|---|-----|
| 11. Sri Venkateswara Arts & Science College,<br>Palem | 757 |
| 12. Hindi Mahavidyalaya, Hyderabad                    | 693 |
| 13. Arts & Science College, jadicherla                | 675 |
| 14. Urdu Arts College                                 | 659 |
| 15. Anwar-U-loom. College, Hyderabad                  | 497 |
| 16. Badruka College of Commerce (Day)                 | 444 |
| 17. Vanitha Mahavidyalaya, Hyderabad                  | 443 |
| 18. Arts & Science College, Godwal                    | 440 |
| 19. R.B.V.R.R. Women's College                        | 382 |
| 20. Nanakram. Bhagwandas Science College              | 377 |
| 21. Vivek Vardhani College (Day)                      | 364 |
| 22. Mumtaz College                                    | 358 |
| 23. St. Francis College, Secunderabad                 | 337 |
| 24. New Science College, Hyderabad                    | 284 |
| 25. Badruka College (Evening)                         | 221 |
| 26. Vivek Vardhani College (Evening)                  | 212 |

**(C) Government Colleges**

|   |     |
|---|-----|
| 27. Government Arts & Science College, Adilabad         | 829 |
| 28. Government Nagarjuna College, Nalgonda              | 587 |
| 29. Government Arts & Science College, Siddipet         | 578 |
| 30. Government Giriraj College, Nizamabad               | 509 |
| 31. S.R. & B.G.N.R. Government Arts College,<br>Khammam | 457 |
| 32. S.R. Government College, Karimnagar                 | 387 |

TABLE SIV.5 POONA UNIVERSITY

Cost Per Student in Undergraduate Courses

| College                               | Pre-degree | 3-year degree course | 4-year degree course |
|---------------------------------------|------------|----------------------|----------------------|
|                                       | Rs.        | Rs.                  | Rs.                  |
| <b>Arts</b>                           |            |                      |                      |
| 1. Fergusson College, Poona           | 269        | 342                  | 319                  |
| 2. Shri Shahu Mandir College, Poona   | 203        | 256                  | 236                  |
| 3. H.P.T. College, Nasik              | 348        | 456                  | 409                  |
| 4. R. B. Borawake College, Shrirampur | 454        | 587                  | 538                  |
| <b>Science</b>                        |            |                      |                      |
| 1. Fergusson College, Poona           | 352        | 400                  | 380                  |
| 2. H. P. T. College, Nasik            | 448        | 521                  | 486                  |
| 3. R. B. Borawake College, Shrirampur | 598        | 814                  | 701                  |

**Commerce**

|   |     |     |     |
|---|-----|-----|-----|
| 1. B. M. College of Commerce              | 247 | 224 | 232 |
| 2. B. Y. K. College of Commerce,<br>Nasik | 323 | 309 | 314 |
| 3. C. D. Jain College, Shri-<br>rampur    | 365 | 532 | 444 |
| 4. Shri Shahu Mandir College,<br>Poona.   | 222 | 285 | 249 |

**Law**

|                       |    |     |    |
|-----------------------|----|-----|----|
| 1. Law College, Poona | .. | 302 | .. |
|-----------------------|----|-----|----|

**Education**

|                               |    |     |    |
|-------------------------------|----|-----|----|
| 1. Tilak College of Education | .. | 725 | .. |
|-------------------------------|----|-----|----|

**Engineering**

|                                  |    |       |    |
|----------------------------------|----|-------|----|
| 1. College of Engineering, Poona | .. | 1,525 | .. |
|----------------------------------|----|-------|----|

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## SUPPLEMENT NOTE V

TABLE SV.1 CONSOLIDATED STATEMENT SHOWING ANTICIPATED  
RECURRING AND CAPITAL EXPENDITURE ON EDUCATION (1966-85)

| Year    | Expenditure on education<br>(Rs. in million) |           |         | Percentage to total of   |                        |
|---------|--|-----------|---------|--------------------------|------------------------|
|         | Total  | Recurring | Capital | Recurring<br>Expenditure | Capital<br>Expenditure |
|         | Rs.  | Rs.       | Rs.     |                          |                        |
| 1966-67 | 6,600  | 5,909     | 691     | 89.5                     | 10.5                   |
| 1967-68 | 7,260  | 6,543     | 717     | 90.1                     | 9.9                    |
| 1968-69 | 7,986  | 7,242     | 744     | 90.7                     | 9.3                    |
| 1969-70 | 8,785  | 8,013     | 772     | 91.2                     | 8.8                    |
| 1970-71 | 9,664  | 8,863     | 801     | 91.7                     | 8.3                    |
| 1971-72 | 10,630                                       | 9,799     | 831     | 92.2                     | 7.8                    |
| 1972-73 | 11,693                                       | 10,830    | 863     | 92.6                     | 7.4                    |
| 1973-74 | 12,862                                       | 11,966    | 896     | 93.0                     | 7.0                    |
| 1974-75 | 14,148                                       | 13,218    | 930     | 93.4                     | 6.6                    |
| 1975-76 | 15,562                                       | 14,596    | 966     | 93.8                     | 6.2                    |
| 1976-77 | 17,118                                       | 16,014    | 1,104   | 93.6                     | 6.4                    |
| 1977-78 | 18,830                                       | 17,568    | 1,262   | 93.3                     | 6.7                    |
| 1978-79 | 20,713                                       | 19,271    | 1,442   | 93.0                     | 7.0                    |
| 1979-80 | 22,784                                       | 21,136    | 1,648   | 92.8                     | 7.2                    |
| 1980-81 | 25,062                                       | 23,178    | 1,884   | 92.5                     | 7.5                    |
| 1981-82 | 27,568                                       | 25,415    | 2,153   | 92.2                     | 7.8                    |

|         |         |         |        |      |     |
|---------|---------|---------|--------|------|-----|
| 1982-83 | 30,325  | 27,864  | 2,461  | 91.9 | 8.1 |
| 1983-84 | 33,358  | 30,545  | 2,813  | 91.6 | 8.4 |
| 1984-85 | 36,694  | 33,479  | 3,215  | 91.2 | 8.8 |
| 1985-8  | 640,364 | 36,682  | 3,682  | 90.9 | 9.1 |
| <hr/>   |         |         |        |      |     |
| TOTAL   | 378,006 | 348,131 | 29,875 | 92.1 | 7.9 |
| <hr/>   |         |         |        |      |     |

N.B. The capital expenditure is comparatively restricted in the first decade because of the need to upgrade salaries of teachers and to provide adequate scholarships.

## APPENDIX I

### AN EXPLANATORY NOTE ON ENROLMENT STATISTICS INCLUDED IN THE REPORT

(Prepared by Shri D. L. Sharma under the guidance of the Member- Secretary)

AI.01. The object of this Note is to explain the basis of compilation for the enrolment statistics included in this Report.

AI.02. The organization of the educational system, as visualised by the Education Commission, has been explained in detail in Chapter II. The manner in which the existing structure in the different States at the school stage is equated with this proposed structure, is shown below:

TABLE AI.1

#### EQUIVALENCE OF CLASSES I-X AT THE SCHOOL STAGE (1965-66)

|                              |            |      |      |
|------------------------------|------------|------|------|
| X                            | X          | XI   | X    |
| IX                           | IX         | X    | IX   |
| VIII                         | VIII       | IX   | VIII |
| VII                          | VII        | VIII | VII  |
| VI                           | VI         | VII  | VI   |
| V                            | V          | VI   | V    |
| IV                           | IV         | V    | IV   |
| III                          | III        | IV   | III  |
| II                           | II         | III  | II   |
| I                            | I          | II   | I    |
| Pre-<br>Primary<br>Education | B<br><br>A | I    |      |



|  |                                      |   |   |
|--|--------------------------------------|---|---|
| As proposed<br>by the<br>Education<br>Commission | Group A<br>Assam<br>Nagaland<br>NEFA | Group B<br>Andhra Pradesh<br>Bihar<br>Gujarat<br>Madras<br>Maharashtra<br>Orissa<br>Dadra & Nagar<br>Haveli<br>Goa, Daman and<br>Diu<br>Pondicherry | Group C<br>Jammu & Kashmir<br>Kerala<br>Madhya Pradesh<br>Mysore<br>Punjab<br>Rajasthan<br>Uttar Pradesh<br>West Bengal<br>A & N Islands<br>Delhi<br>Himachal Pradesh<br>L.M.A. Islands<br>Manipur<br>Tripura |
|--|--------------------------------------|---|---|

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A

**Explanatory Note.** (i) The chart given above shows the position in 1965-66. It has varied from time to time. In tabulating enrolment, the position as it was in the year concerned, has been adopted.

(ii) There is no public examination at the end of Class X in Madhya Pradesh, Delhi and A & N Islands. But the higher secondary examination in these areas, which is held at the end of Class XI, leads to the three-year degree course. We have, therefore, equated Class X in these areas with the class leading to the high school examination in other States.

AI.03. In the school stage ending with the high school, the total duration of schooling is 12 years in one group of States and Union Territories, 11 years in another group, and 10 years in the third group.

AI.04. The central point in this proposal is to treat the public examination at the end of the high school stage (which is Class X in some States and Class XI in others) as equivalent and to go downwards, equating each successive class in school education and also upwards, equating each successive year in higher education.

In the enrolment statistics given in the Report, the equation of school classes is as follows:

TABLE AI.2

| Class in the Commission's Report | Equated with   |
|----------------------------------|--|
| Pre-Primary Stage                | Infant A and B in Group A, Class I in Group B and Pre-Primary (not shown in the chart) in 1 State. |
| Class                            |  |
| I                                | Class I in Groups A & C and Class II in Group B.   |
| II                               | Class II in Groups A & C and Class III in Group B, and so on.                                      |
| X                                | Class X in Groups A & C, and Class XI in Group B.  |

AI.05. The equivalence in higher education courses (arts and science) has been shown in the chart given below.

TABLE AI.3  
EQUIVALENCE IN HIGHER EDUCATION  
(1965-66)

| (a)          | (b)     | (c)     | (d)     | (e)     | (f)            | (g)     |
|--------------|---------|---------|---------|---------|----------------|---------|
|              | III     | III     | A       | III     | III            | III     |
| First Degree | II<br>I | II<br>I | II<br>I | II<br>I | II<br>I        | II<br>I |
| Higher       | XII     | II      | XII     | A       | A              | A       |
| Secondary    | XI      | I       | XI      | XI      | XI/XII/<br>PUC | PUC     |

| (a) | (b)                                     | (c)  | (d)  | (e)                                | (f)   | (g)  |
|-----|---|--|------|------------------------------------|---|--|
|     | As proposed by the Education Commission | Kerala (The first two years belong to junior Colleges) | U.P. | Madhya Pradesh A & N Islands Delhi | Andhra Pradesh Assam Bihar Jammu & Kashmir Daman, Maharashtra Mysore Punjab Rajasthan West Bengal Himachal Pradesh Manipur NEFA Tripura | Gujarat Madras Nagaland Orissa and Diu Pondicherry |

### Explanatory Note

- (i) Columns marked 'A' show the year to be added by 1986.
- (ii) The chart given above shows the position in 1965- 66. It has varied from time to time. In tabulating enrolment, the position as it was in the year concerned has been adopted.
- (iii) PUC=Pre-University Course.

**AI.06. Pre-Primary Education.** In our statistics, pre-primary education includes enrolments in the following three categories:

- (1) Pre-Primary classes proper
- (2) Infant A Class
- (3) Infant B Class and Class I (where it corresponds to the Infant B Class).

AI.07. In each year of tabulation the corresponding enrolments in an the States and Union Territories which had the categories mentioned above have been aggregated together and given in Table AI.4

**AI.08. General School Education.** (Classes I-X). Enrolment in Classes I-X as aggregated by us, includes Classes II-XI in those States where the school stage is spread

over 11 years and Classes I-X in all the other States. The retabulated enrolments are **given in Table AI.5.**

**AI.09. Basis of Estimating Enrolments at the School Stage in 1965-66.** The total enrolments at the school stage for 1965-66 were assumed to be the same as given by the Planning Commission. In breaking down these enrolments class by class, however, it was assumed that owing to the reduction of wastage and the increasing desire to stay longer at school the proportion of the enrolment in higher classes to the total enrolment at the school stage will be a little better in 1965-66 than in 1960-61. Table AI.6 shows the actual proportion of the enrolments in each class to the total enrolment at the school stage for the years 1950-51, 1955-56 and 1960-61 (on the new pattern of aggregation adopted by us). It also gives the assumptions made by us regarding this proportion for 1965-66.

**AI.10. General School Education (Classes XI and XII).** In tabulating enrolments in general school education in Classes XI and XII, the enrolments in the following categories were included:

- (i) Class XI of the higher secondary schools in all the States which have adopted the higher secondary pattern.
- (ii) The pre-university class.
- (iii) Intermediate classes (1st and 2nd year) in U.P. except the second year in the Universities of Aligarh and Banaras which have adopted the three-year degree course.
- (iv) The first year of the Intermediate class in all the other States which have now adopted the three-year degree course (the second year, where it existed, has been shown in the undergraduate stage).

TABLE A1.4. ENROLMENT IN PRE-PRIMARY EDUCATION (1950-51 TO 1965-66)

(in thousands)

| Class                          | 1950-51      |              |              | 1955-56      |              |              | 1960-61      |              |              | 1965-66 (Estimated) |              |               |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------------|--------------|---------------|
|                                | Boys         | Girls        | Total        | Boys         | Girls        | Total        | Boys         | Girls        | Total        | Boys                | Girls        | Total         |
| Pre-Primary . . . . .          | 15           | 13           | 28           | 45           | 31           | 75           | 97           | 82           | 179          | 130                 | 120          | 250           |
| Infant A . . . . .             | 687          | 221          | 908          | 445          | 224          | 669          | 352          | 227          | 579          | 453                 | 300          | 753           |
| Infant B and Class 1 . . . . . | 2,675        | 1,566        | 4,241        | 4,108        | 2,283        | 6,391        | 4,932        | 2,922        | 7,855        | 6,563               | 4,207        | 10,770        |
| <b>TOTAL . . . . .</b>         | <b>3,377</b> | <b>1,800</b> | <b>5,177</b> | <b>4,598</b> | <b>2,537</b> | <b>7,135</b> | <b>5,381</b> | <b>3,231</b> | <b>8,612</b> | <b>7,146</b>        | <b>4,627</b> | <b>11,773</b> |

Source: Ministry of Education, Form A of the States concerned till 1960-61. The figures for 1965-66 were estimated in the Secretariat of the Commission.  
 N.B. Totals do not tally because of rounding.

TABLE A1.5. ENROLMENT IN CLASSES I-X (1950-51 TO 1965-66)

(in thousands)

| Class                             | 1950-51 |       |        | 1955-56 |       |        | 1960-61 |        |        | 1965-66 (Estimated) |        |        |
|-----------------------------------|---------|-------|--------|---------|-------|--------|---------|--------|--------|---------------------|--------|--------|
|                                   | Boys    | Girls | Total  | Boys    | Girls | Total  | Boys    | Girls  | Total  | Boys                | Girls  | Total  |
| I . . . . .                       | 3,750   | 1,466 | 5,216  | 4,808   | 2,137 | 6,945  | 6,401   | 3,127  | 9,528  | 9,057               | 4,827  | 13,884 |
| II . . . . .                      | 2,664   | 939   | 3,603  | 3,149   | 1,295 | 4,443  | 4,383   | 2,026  | 6,409  | 6,246               | 3,210  | 9,456  |
| III . . . . .                     | 2,101   | 686   | 2,788  | 2,450   | 934   | 3,384  | 3,534   | 1,538  | 5,073  | 4,888               | 2,546  | 7,434  |
| IV . . . . .                      | 1,587   | 458   | 2,045  | 1,963   | 645   | 2,608  | 2,852   | 1,135  | 3,987  | 4,345               | 1,971  | 6,316  |
| Total of classes I-IV . . . . .   | 10,102  | 3,549 | 13,651 | 12,369  | 5,011 | 17,380 | 17,170  | 7,826  | 24,996 | 24,536              | 12,554 | 37,090 |
| V . . . . .                       | 1,111   | 244   | 1,355  | 1,470   | 398   | 1,867  | 2,276   | 814    | 3,090  | 3,666               | 1,530  | 5,216  |
| VI . . . . .                      | 873     | 184   | 1,056  | 1,215   | 304   | 1,519  | 1,819   | 601    | 2,421  | 2,897               | 1,151  | 4,048  |
| VII . . . . .                     | 686     | 131   | 816    | 975     | 232   | 1,206  | 1,491   | 461    | 1,952  | 2,399               | 886    | 3,285  |
| Total of classes V-VII . . . . .  | 2,669   | 559   | 3,228  | 3,659   | 933   | 4,592  | 5,587   | 1,876  | 7,463  | 8,962               | 3,587  | 12,459 |
| VIII . . . . .                    | 581     | 91    | 672    | 790     | 163   | 953    | 1,191   | 320    | 1,511  | 1,856               | 620    | 2,476  |
| IX . . . . .                      | 378     | 54    | 433    | 630     | 120   | 751    | 920     | 220    | 1,140  | 1,494               | 421    | 1,915  |
| X . . . . .                       | 315     | 41    | 356    | 505     | 91    | 596    | 764     | 166    | 930    | 1,267               | 332    | 1,599  |
| Total of classes VIII-X . . . . . | 1,275   | 186   | 1,461  | 1,926   | 374   | 2,300  | 2,876   | 706    | 3,582  | 4,617               | 1,373  | 5,990  |
| GRAND TOTAL . . . . .             | 14,046  | 4,293 | 18,339 | 17,954  | 6,318 | 24,272 | 25,633  | 10,408 | 36,041 | 38,115              | 17,514 | 55,629 |

Sources: Ministry of Education, Form A of the States concerned till 1960-61. The figures for 1965-66 were estimated in the Secretariat of the Commission.  
 N.B. Totals do not tally because of rounding.

APPENDIX I (A)

TABLE AI.6

PROPORTION OF ENROLMENT IN EACH CLASS AT THE SCHOOL STAGE TO  
TOTAL ENROLMENT

| Class       | 1965-66   |            | 1950-51   |            | 1955-56   |            | 1960-61<br>(estimated) |            |
|-------------|-----------|------------|-----------|------------|-----------|------------|------------------------|------------|
|             | Boys<br>% | Girls<br>% | Boys<br>% | Girls<br>% | Boys<br>% | Girls<br>% | Boys<br>%              | Girls<br>% |
| Pre-Primary | 0.1       | 0.2        | 0.2       | 0.4        | 0.3       | 0.6        | 0.3                    | 0.6        |
| A           | 3.9       | 3.6        | 2.0       | 2.5        | 1.1       | 1.7        | 1.0                    | 1.3        |
| B           | 15.4      | 25.7       | 18.2      | 25.8       | 15.9      | 21.4       | 14.5                   | 19.0       |
| I           | 21.5      | 24.1       | 21.3      | 24.1       | 20.6      | 22.9       | 20.0                   | 21.8       |
| II          | 15.3      | 15.4       | 14.0      | 14.6       | 14.1      | 14.9       | 13.8                   | 14.5       |
| III         | 12.1      | 11.3       | 10.9      | 10.5       | 11.4      | 11.3       | 10.8                   | 11.5       |
| IV          | 9.1       | 7.5        | 8.7       | 7.3        | 9.2       | 8.3        | 9.6                    | 8.9        |
| V           | 6.4       | 4.0        | 6.5       | 4.5        | 7.3       | 6.0        | 8.1                    | 7.0        |
| VI          | 5.0       | 3.0        | 5.4       | 3.4        | 5.9       | 4.4        | 6.4                    | 5.2        |
| VII         | 3.9       | 2.1        | 4.3       | 2.6        | 4.8       | 3.4        | 5.3                    | 4.0        |
| VIII        | 3.3       | 1.5        | 3.5       | 1.8        | 3.8       | 2.3        | 4.1                    | 2.8        |
| IX          | 2.2       | 0.9        | 2.8       | 1.4        | 3.0       | 1.6        | 3.3                    | 1.9        |
| X           | 1.8       | 0.7        | 2.2       | 1.0        | 2.5       | 1.2        | 2.8                    | 1.5        |
| TOTAL       | 100.0     | 100.0      | 100.0     | 100.0      | 100.0     | 100.0      | 100.0                  | 100.0      |

Source. Ministry of Education, Form A of the States till 1960- 61. The figures for 1965-66 were estimated in the Secretariat of the Commission.

In short, we have shown the first year of the Intermediate class as a part of Classes XI and XII in all cases. Where the three-year degree course has been adopted, the second year has been shown in the undergraduate stage. Where the three-year degree course has

not been adopted, both the years have been shown under classes XI and XII, the only exception to this being the city of Bombay for which no separate figures are available.

The Intermediate (Commerce) classes have been regarded as part of general education and the corresponding enrolment has been shown under Classes XI and XII.

The retabulated enrolments on these assumptions have been given in Table AI.7

**AI.11. General Education (Undergraduate Stage).** In our retabulation, the enrolments in general education at the undergraduate stage include the following:

(i) Enrolments in the second year of the Intermediate classes in all States which have now adopted the three- year degree course.

(ii) Enrolments in the First Degree Courses for Arts and Science.

(iii) Enrolments in the First Degree Courses for Commerce.

**AI.12. General Education (Postgraduate and Research).** There are no difficulties about the enrolments in general education at the postgraduate stage and research. These have been taken from the publications of the Ministry of Education and are given in Table AI.8 along with the enrolments at undergraduate stage.

**AI. 13. Vocational Schools.** The enrolment in vocational schools is of a mixed character. In some courses such as polytechnics, admission is given only to those who have completed the secondary school. In other courses such as teacher-training or in industrial training institutes, admission is given to those who have completed the secondary school as well as to those who have completed the primary school only. In some other courses such as arts and crafts (e.g. tailoring) the admission is mostly of those who have not completed the secondary school, although there are a few students who have done so. It is, therefore, necessary to make certain assumptions regarding the enrolment of students who have completed the secondary school and of those who have completed the primary school only. We make the following assumptions:

(i) Teacher Training. 20 per cent of the enrolment was regarded as not having completed the secondary school.

(ii) Arts and Crafts. All the enrolment was regarded as not having completed the secondary school.

In all other vocational courses, such as engineering and technology, medicine and veterinary science, agriculture and forestry, commerce, physical education, library science, co-operation, marine training, etc., the enrolment was regarded as being of the higher secondary stage or equivalent to Classes XI to XII. We realize that there is a small proportion of students in agriculture and medical schools who have not completed the



secondary school. But we have assumed that this will be off-set by the enrolment of students who have completed the secondary school and joined courses of arts and crafts.

AI.14. The enrolments in vocational courses retabulated on these bases are given in Table AI.9

**AI.15. Professional Education at the University Stage.** In professional education at the university stage, we divided the enrolments into three parts:

- (i) Enrolments corresponding to the higher secondary stage or Classes XI and XII;
- (ii) Enrolments for the first degree or the undergraduate stage; and
- (iii) Enrolments for the second degree or the postgraduate stage.

**Enrolments corresponding to those at the higher secondary stage (Classes XI and XII)**

In the statistics of enrolments in training colleges, the enrolments of graduates preparing for the B.T. or B.Ed. degree are mixed up with those of matriculates undergoing a one or two year course. The enrolments in the B.T. or B.Ed. class are also separately available in the publication, Education in Universities issued by the Ministry of Education. Deducting these, after making adjustments for certain relevant factors, we estimated the enrolments of students in the training colleges who have completed the secondary school stage only. These have been shown as belonging to the higher secondary stage.

Similarly the enrolments for Intermediate Science (Agriculture) have been estimated and shown as vocational education at the school stage corresponding to Classes XI and XII.

In the same way we have estimated the enrolments in Intermediate (Commerce) and as pointed out earlier these have been shown under general education at the higher secondary stage.

All the remaining enrolments in the professional courses in higher education were divided into two categories: enrolments at the first degree stage (or undergraduate) and enrolments at the second and research degrees (or postgraduate).

AI.16. The retabulated enrolments on the above assumptions have been shown in Table AI. 10.

**AI.17. Total Enrolments.** The total enrolments in the educational system as a whole, retabulated on the lines indicated above, are given in Table AI. 11. In this context the following points may be noted:

- (i) Enrolments in vocational education corresponding to the lower secondary stage (Classes VIII-X) have been taken from the school portion in Table AI. 9.

(ii) Enrolments in vocational education corresponding to the higher secondary stage (Classes XI-XII) have been taken from Tables AI. 9 and AI. 10.

(iii) No attempt has been made to retabulate the enrolments in special schools and colleges. These have been reproduced from the publications of the Ministry of Education.

**AI.18. Enrolment Statistics published by the Ministry of Education.** The enrolment statistics published by the Ministry of Education adopt a different system of equivalence at the school stage. They start by equating the lowest classes with one another, i.e. Infant 'A' in Assam, Class I in a State like Maharashtra with 11-year school system and also Class I in a State like Uttar Pradesh with a 10-year school system are all equated together. The equivalence proceeds upwards class by class. In this method, the main weakness is that classes which are quite unlike to each other are added together. For example, Class X of Uttar Pradesh which is matriculation class is added to Class X of Bihar which is pre-matriculation class or Class XI of Delhi which is the higher secondary class is added to Class XI of Maharashtra which is the matriculation class.

The enrolments according to this system have been given in Table AI. 12 for purposes of comparison. It will be seen that the totals of enrolments in Tables AI. 11 and AI. 12 tally. But the enrolments at substages do not tally for reasons already explained.

TABLE A17. ENROLMENT IN GENERAL SCHOOL EDUCATION CLASSES XI AND XII (1950-51 TO 1965-66)

| Type of Course                | 1950-51 |        |         | 1955-56 |        |         | 1960-61 |        |         | 1965-66 (Estimated) |         |         |
|-------------------------------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------------------|---------|---------|
|                               | Boys    | Girls  | Total   | Boys    | Girls  | Total   | Boys    | Girls  | Total   | Boys                | Girls   | Total   |
| <i>Classes XI and XII</i>     |         |        |         |         |        |         |         |        |         |                     |         |         |
| General Education . . .       | 121,693 | 17,193 | 138,886 | 223,388 | 35,635 | 259,043 | 384,964 | 72,353 | 457,317 | 638,690             | 138,320 | 777,010 |
| Intermediate (Commerce) . . . | 18,554  | 58     | 18,612  | 28,242  | 242    | 28,484  | 33,303  | 405    | 33,708  | 56,745              | 700     | 57,445  |
| TOTAL . . .                   | 140,247 | 17,251 | 157,498 | 251,630 | 35,897 | 287,527 | 418,267 | 72,758 | 491,025 | 695,435             | 139,020 | 834,455 |

Source: Ministry of Education, Form A of the States concerned.

TABLE A18. ENROLMENT IN GENERAL EDUCATION AT THE UNDERGRADUATE AND POSTGRADUATE STAGES (1950-51 TO 1965-66)

| Type of Course                                   | 1950-51 |        |         | 1955-56 |        |         | 1960-61 |        |         | 1965-66 (Estimated) |         |         |
|--|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------------------|---------|---------|
|  | Boys    | Girls  | Total   | Boys    | Girls  | Total   | Boys    | Girls  | Total   | Boys                | Girls   | Total   |
| 1. Undergraduate Courses in Arts & Science . . . | 153,151 | 22,029 | 175,180 | 248,571 | 45,961 | 294,532 | 313,385 | 82,483 | 395,868 | 549,510             | 147,480 | 696,990 |
| 2. Undergraduate Courses in Commerce . . .       | 15,579  | 104    | 15,683  | 27,254  | 162    | 27,416  | 37,919  | 416    | 38,335  | 61,455              | 800     | 62,255  |
| TOTAL (UNDERGRADUATE)                            | 168,730 | 22,133 | 190,863 | 275,825 | 46,123 | 321,948 | 351,304 | 82,899 | 434,203 | 610,965             | 148,280 | 759,245 |
| 3. Postgraduate                                  |         |        |         |         |        |         |         |        |         |                     |         |         |
| M.A. & M.Sc. . . .                               | 14,401  | 2,127  | 16,528  | 21,293  | 4,040  | 25,333  | 37,541  | 9,298  | 46,839  | 62,350              | 15,910  | 78,269  |
| Research . . .                                   | 1,051   | 139    | 1,190   | 2,193   | 371    | 2,564   | 3,576   | 697    | 4,273   | 6,450               | 1,290   | 7,740   |
| TOTAL (POSTGRADUATE AND RESEARCH)                | 15,452  | 2,266  | 17,718  | 23,486  | 4,411  | 27,897  | 41,117  | 9,995  | 51,112  | 68,800              | 17,200  | 86,000  |

Source: Ministry of Education, Form A of the States concerned.

TABLE A1.9. ENROLMENT IN VOCATIONAL SCHOOLS/COURSES (1950-51 TO 1965-66)

| Type of Course                                     | 1950-51        |               |                | 1955-56        |               |                | 1960-61        |               |                | 1965-66 (Estimated) |                |                |
|--|----------------|---------------|----------------|----------------|---------------|----------------|----------------|---------------|----------------|---------------------|----------------|----------------|
|  | Boys           | Girls         | Total          | Boys           | Girls         | Total          | Boys           | Girls         | Total          | Boys                | Girls          | Total          |
| <i>Lower Secondary Stage<br/>(Classes VIII—X)</i>  |                |               |                |                |               |                |                |               |                |                     |                |                |
| 1. Teacher Training                                | 10,414         | 3,599         | 14,013         | 13,007         | 5,176         | 18,183         | 18,226         | 6,310         | 24,536         | ..                  | ..             | ..             |
| 2. Arts & Crafts etc.                              | 18,185         | 14,156        | 32,341         | 25,553         | 26,669        | 52,222         | 46,584         | 29,110        | 75,694         | ..                  | ..             | ..             |
| <b>TOTAL</b>                                       | <b>28,599</b>  | <b>17,755</b> | <b>46,354</b>  | <b>38,560</b>  | <b>31,845</b> | <b>70,405</b>  | <b>64,810</b>  | <b>35,420</b> | <b>100,230</b> | <b>90,100</b>       | <b>46,800</b>  | <b>136,900</b> |
| <i>Higher Secondary Stage<br/>(Classes XI—XII)</i> |                |               |                |                |               |                |                |               |                |                     |                |                |
| 1. Teacher Training                                | 41,655         | 14,395        | 56,050         | 52,026         | 20,705        | 72,731         | 72,904         | 25,242        | 98,146         | ..                  | ..             | ..             |
| 2. Engineering and Technology                      | 20,811         | 337           | 21,148         | 41,181         | 214           | 41,395         | 35,864         | 438           | 36,302         | ..                  | ..             | ..             |
| 3. Medicine and Veterinary Science                 | 3,221          | 1,452         | 4,673          | 4,308          | 2,565         | 6,873          | 5,332          | 6,536         | 11,868         | ..                  | ..             | ..             |
| 4. Agriculture and Forestry                        | 1,872          | 9             | 1,881          | 5,332          | 14            | 5,346          | 7,832          | 74            | 7,906          | ..                  | ..             | ..             |
| 5. Commerce  | 34,206         | 3,280         | 37,486         | 69,241         | 10,326        | 79,567         | 95,790         | 17,034        | 112,824        | ..                  | ..             | ..             |
| 6. Physical Education*                             | 1,000          | 300           | 1,300          | 1,871          | 372           | 2,243          | 2,920          | 515           | 3,435          | ..                  | ..             | ..             |
| 7. Library Science                                 | ..             | ..            | ..             | ..             | ..            | ..             | 50             | ..            | 50             | ..                  | ..             | ..             |
| 8. Co-operation                                    | ..             | ..            | ..             | ..             | ..            | ..             | 1,656          | 15            | 1,671          | ..                  | ..             | ..             |
| 9. Marine Training                                 | 116            | ..            | 116            | 1,206          | ..            | 1,206          | 1,561          | ..            | 1,561          | ..                  | ..             | ..             |
| 10. Other Subjects                                 | ..             | ..            | ..             | 354            | ..            | 354            | 770            | 275           | 1,045          | ..                  | ..             | ..             |
| <b>TOTAL</b>                                       | <b>102,881</b> | <b>19,773</b> | <b>122,654</b> | <b>175,519</b> | <b>34,196</b> | <b>209,715</b> | <b>274,688</b> | <b>50,129</b> | <b>324,817</b> | <b>439,900</b>      | <b>73,200</b>  | <b>513,100</b> |
| <b>GRAND TOTAL</b>                                 | <b>131,480</b> | <b>37,528</b> | <b>169,008</b> | <b>214,079</b> | <b>66,041</b> | <b>280,120</b> | <b>339,498</b> | <b>85,549</b> | <b>425,047</b> | <b>530,000</b>      | <b>120,000</b> | <b>650,000</b> |

Source: Ministry of Education, Form A.

\*We have ignored, for 1950-51, the enrolment in Aksharas because this enumeration was later on discontinued.

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TABLE A1.10. ENROLMENT IN PROFESSIONAL COURSES (1950-51 TO 1965-66)

| Type of Course          | 1950-51 |       |        | 1955-56 |       |        | 1960-61 |        |        | 1965-66 (Estimated) |        |         |
|-------------------------|---------|-------|--------|---------|-------|--------|---------|--------|--------|---------------------|--------|---------|
|                         | Boys    | Girls | Total  | Boys    | Girls | Total  | Boys    | Girls  | Total  | Boys                | Girls  | Total   |
| <i>Agriculture</i>      |         |       |        |         |       |        |         |        |        |                     |        |         |
| Higher Secondary Stage  | 1,630   | 2     | 1,632  | 2,359   | 16    | 2,375  | 6,717   | 74     | 6,791  | 11,600              | 200    | 11,800  |
| Undergraduate Stage     | 2,579   | 20    | 2,599  | 3,000   | 15    | 3,015  | 8,627   | 65     | 8,692  | 14,750              | 150    | 14,900  |
| Postgraduate & Research | 400     | 2     | 402    | 481     | 6     | 487    | 353     | 10     | 363    | 3,280               | 20     | 3,300   |
| TOTAL                   | 4,609   | 24    | 4,633  | 5,840   | 37    | 5,877  | 15,699  | 149    | 15,848 | 29,630              | 370    | 30,000  |
| <i>Commerce</i>         |         |       |        |         |       |        |         |        |        |                     |        |         |
| Higher Secondary Stage  | 18,554  | 58    | 18,612 | 28,242  | 242   | 28,484 | 33,303  | 405    | 33,708 | 56,745              | 700    | 57,445  |
| Undergraduate Stage     | 15,579  | 104   | 15,683 | 27,254  | 162   | 27,416 | 37,919  | 416    | 38,335 | 61,455              | 800    | 62,255  |
| Postgraduate & Research | 2,047   | 5     | 2,052  | 3,000   | 18    | 3,018  | 6,226   | 43     | 6,269  | 9,440               | 60     | 9,500   |
| TOTAL                   | 36,180  | 167   | 36,347 | 58,496  | 422   | 58,918 | 77,448  | 864    | 78,312 | 127,640             | 1,560  | 129,200 |
| <i>Teacher Training</i> |         |       |        |         |       |        |         |        |        |                     |        |         |
| Higher Secondary Stage  | 180     | 150   | 330    | 1,112   | 890   | 2,002  | 17,656  | 9,032  | 26,688 | 25,415              | 13,685 | 39,100  |
| Undergraduate Stage     | 3,399   | 1,486 | 4,885  | 8,500   | 3,288 | 11,788 | 13,500  | 6,000  | 19,500 | 21,300              | 10,300 | 32,000  |
| Postgraduate & Research | 260     | 110   | 370    | 350     | 140   | 490    | 450     | 170    | 620    | 600                 | 300    | 900     |
| TOTAL                   | 3,839   | 1,746 | 5,585  | 9,962   | 4,318 | 14,280 | 31,606  | 15,202 | 46,808 | 47,315              | 24,485 | 72,000  |

Source: Ministry of Education, Form A till 1960-61. For 1965-66 figures have been estimated in the Secretariat of the Education Commission.

TABLE A1.10. ENROLMENT IN PROFESSIONAL COURSES (1950-51 TO 1965-66) (Contd.)

| Type of Course                    | 1950-51 |       |        | 1955-56 |       |        | 1960-61 |       |        | 1965-66 (Estimated) |       |        |
|-----------------------------------|---------|-------|--------|---------|-------|--------|---------|-------|--------|---------------------|-------|--------|
|                                   | Boys    | Girls | Total  | Boys    | Girls | Total  | Boys    | Girls | Total  | Boys                | Girls | Total  |
| <i>Engineering and Technology</i> |         |       |        |         |       |        |         |       |        |                     |       |        |
| Undergraduate Stage               | 12,968  | 37    | 13,005 | 19,311  | 34    | 19,345 | 46,719  | 372   | 47,091 | ..                  | ..    | 78,000 |
| Postgraduate and Research         | 260     | 3     | 263    | 509     | 4     | 513    | 745     | 2     | 747    | ..                  | ..    | 2,000  |
| TOTAL                             | 13,228  | 40    | 13,268 | 19,820  | 38    | 19,858 | 47,464  | 374   | 47,838 | ..                  | ..    | 80,000 |
| <i>Law</i>                        |         |       |        |         |       |        |         |       |        |                     |       |        |
| Undergraduate Stage               | 12,936  | 287   | 13,223 | 19,349  | 331   | 19,680 | 25,400  | 769   | 26,169 | 30,662              | 1,038 | 31,700 |
| Postgraduate and Research         | 207     | 4     | 211    | 572     | 16    | 588    | 936     | 36    | 972    | 1,250               | 50    | 1,300  |
| TOTAL                             | 13,143  | 291   | 13,434 | 19,921  | 347   | 20,268 | 26,336  | 805   | 27,141 | 31,912              | 1,088 | 33,000 |
| <i>Medicine</i>                   |         |       |        |         |       |        |         |       |        |                     |       |        |
| Undergraduate Stage               | 11,930  | 2,231 | 14,161 | 19,721  | 3,719 | 23,440 | 29,264  | 7,638 | 36,902 | ..                  | ..    | 60,500 |
| Postgraduate and Research         | 690     | 110   | 800    | 1,364   | 268   | 1,632  | 2,900   | 600   | 3,500  | ..                  | ..    | 4,500  |
| TOTAL                             | 12,620  | 2,341 | 14,961 | 21,085  | 3,987 | 25,072 | 32,164  | 8,238 | 40,402 | ..                  | ..    | 65,000 |
| <i>Veterinary Science</i>         |         |       |        |         |       |        |         |       |        |                     |       |        |
| Undergraduate Stage               | 1,290   | 6     | 1,296  | 3,536   | 13    | 3,549  | 5,328   | 45    | 5,373  | ..                  | ..    | 6,250  |
| Postgraduate and Research         | 50      | ..    | 50     | 100     | ..    | 100    | 170     | 2     | 172    | ..                  | ..    | 250    |
| TOTAL                             | 1,340   | 6     | 1,346  | 3,636   | 13    | 3,649  | 5,498   | 47    | 5,545  | ..                  | ..    | 6,500  |

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TABLE A1.10. ENROLMENT IN PROFESSIONAL COURSES (1950-51 TO 1965-66) (Contd.)

| Type of Course            | 1950-51 |       |        | 1955-56 |       |         | 1960-61 |        |         | 1965-66 (Estimated) |        |         |
|---------------------------|---------|-------|--------|---------|-------|---------|---------|--------|---------|---------------------|--------|---------|
|                           | Boys    | Girls | Total  | Boys    | Girls | Total   | Boys    | Girls  | Total   | Boys                | Girls  | Total   |
| <i>Forestry</i>           |         |       |        |         |       |         |         |        |         |                     |        |         |
| Undergraduate Stage       | 243     | ..    | 243    | 250     | ..    | 250     | 558     | ..     | 558     | 600                 | ..     | 600     |
| Postgraduate and Research | 70      | ..    | 70     | 70      | ..    | 70      | 125     | ..     | 125     | 200                 | ..     | 200     |
| TOTAL                     | 313     | ..    | 313    | 320     | ..    | 320     | 683     | ..     | 683     | 800                 | ..     | 800     |
| <i>Others</i>             |         |       |        |         |       |         |         |        |         |                     |        |         |
| Undergraduate Stage       | 323     | 53    | 376    | 656     | 51    | 707     | 1,944   | 410    | 2,354   | ..                  | ..     | 3,250   |
| Postgraduate and Research | ..      | ..    | ..     | 40      | 5     | 45      | 145     | 35     | 180     | ..                  | ..     | 250     |
| TOTAL                     | 323     | 53    | 376    | 696     | 56    | 752     | 2,089   | 445    | 2,534   | ..                  | ..     | 3,500   |
| <i>Grand Total</i>        |         |       |        |         |       |         |         |        |         |                     |        |         |
| Higher Secondary Stage    | 20,364  | 210   | 20,574 | 31,713  | 1,148 | 32,861  | 57,676  | 9,511  | 67,187  | 93,760              | 14,585 | 108,345 |
| Undergraduate Stage       | 61,247  | 4,224 | 65,471 | 101,377 | 7,613 | 109,190 | 169,239 | 15,715 | 184,974 | 256,040             | 33,415 | 289,455 |
| Postgraduate and Research | 3,984   | 234   | 4,218  | 6,486   | 457   | 6,943   | 12,052  | 898    | 12,950  | 20,200              | 2,000  | 22,200  |
| TOTAL OF ALL STAGES       | 85,595  | 4,668 | 90,263 | 139,776 | 9,218 | 148,994 | 238,987 | 26,124 | 265,111 | 370,000             | 50,000 | 420,000 |

Source: Ministry of Education, Form A, except for 1965-66 which have been estimated in the Secretariat of the Commission.

Note: For net enrolments in professional education, the enrolments in I. Com. and B. Com. which are included in the above figures should be excluded.

TABLE A1.1. TOTAL ENROLMENT IN THE EDUCATIONAL SYSTEM (RETABULATED ON THE NEW PATTERN)  
(1950-51 TO 1965-66)

(In thousands)

| Stage of Education   | 1950-51       |              |               | 1955-56       |              |               | 1960-61       |               |               | 1965-66 (Estimated) |               |               |
|--|---------------|--------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|---------------------|---------------|---------------|
|  | Boys          | Girls        | Total         | Boys          | Girls        | Total         | Boys          | Girls         | Total         | Boys                | Girls         | Total         |
| <i>General Education</i>   |               |              |               |               |              |               |               |               |               |                     |               |               |
| 1. Pre-Primary . . . . .   | 3,377         | 1,800        | 5,177         | 4,598         | 2,537        | 7,135         | 5,381         | 3,231         | 8,612         | 7,146               | 4,627         | 11,773        |
| 2. Lower Primary<br>(Classes I to IV) . . . . .                      | 10,102        | 3,549        | 13,651        | 12,369        | 5,011        | 17,380        | 17,170        | 7,826         | 24,996        | 24,536              | 12,554        | 37,090        |
| 3. Higher Primary<br>(Classes V to VII) . . . . .                    | 2,669         | 559          | 3,228         | 3,659         | 933          | 4,593         | 5,587         | 1,876         | 7,463         | 8,902               | 3,587         | 12,549        |
| 4. Lower Secondary<br>(Classes VIII to X) . . . . .                  | 1,275         | 186          | 1,461         | 1,926         | 374          | 2,300         | 2,876         | 706           | 3,582         | 4,617               | 1,373         | 5,990         |
| 5. Higher Secondary<br>(Classes XI to XII) . . . . .                 | 140           | 17           | 157           | 252           | 36           | 288           | 418           | 73            | 491           | 695                 | 139           | 834           |
| 6. Undergraduate . . . . .   | 169           | 22           | 191           | 276           | 46           | 322           | 351           | 83            | 434           | 611                 | 148           | 759           |
| 7. Postgraduate and<br>Research . . . . .                            | 15            | 2            | 18            | 23            | 4            | 28            | 41            | 10            | 51            | 69                  | 17            | 86            |
| <i>Vocational Education</i>  |               |              |               |               |              |               |               |               |               |                     |               |               |
| 8. At the Lower Sec-<br>ondary Stage . . . . .                       | 29            | 18           | 46            | 39            | 32           | 70            | 65            | 35            | 100           | 90                  | 47            | 137           |
| 9. At the Higher Sec-<br>ondary Stage . . . . .                      | 105           | 20           | 125           | 179           | 35           | 214           | 299           | 50            | 358           | 477                 | 87            | 564           |
| 10. Professional Education<br>(First Degree) . . . . .               | 46            | 4            | 50            | 74            | 7            | 82            | 131           | 15            | 147           | 195                 | 33            | 227           |
| 11. Professional Education<br>(Postgraduate &<br>Research) . . . . . | 4             | ..           | 4             | 6             | 1            | 7             | 12            | 1             | 13            | 20                  | 2             | 22            |
| <i>Special Education</i>   |               |              |               |               |              |               |               |               |               |                     |               |               |
| 12. Special Schools . . . . .  | 132           | 18           | 150           | 182           | 33           | 215           | 162           | 36            | 197           | 185                 | 40            | 225           |
| 13. Special Colleges . . . . .                                       | 6             | 2            | 7             | 9             | 3            | 12            | 15            | 7             | 22            | 23                  | 12            | 35            |
| <b>Total . . . . .</b>   | <b>18,068</b> | <b>6,197</b> | <b>24,265</b> | <b>23,592</b> | <b>9,083</b> | <b>32,645</b> | <b>32,508</b> | <b>13,959</b> | <b>46,467</b> | <b>47,626</b>       | <b>22,666</b> | <b>70,292</b> |

Note: Totals do not tally because of rounding.

APPENDIX I (cont)



TABLE AI.12 ENROLMENT IN EDUCATION ON THE EXISTING PATTERN (1950-51 TO 1965-66)

(In thousands)

| Stage of Education                                  | 1950-51        |               |                | 1955-56       |              |               | 1960-61         |                 |                 | 1965-66 (Estimated) |               |               |
|---|----------------|---------------|----------------|---------------|--------------|---------------|-----------------|-----------------|-----------------|---------------------|---------------|---------------|
|   | Boys           | Girls         | Total          | Boys          | Girls        | Total         | Boys            | Girls           | Total           | Boys                | Girls         | Total         |
| <i>General Education</i>                            |                |               |                |               |              |               |                 |                 |                 |                     |               |               |
| Pre-Primary . . . . .                               | 15             | 13            | 28             | 45            | 31           | 75            | 97              | 82              | 179             | 130                 | 120           | 250           |
| Lower Primary (Classes I-IV)                        | 12,294         | 4,961         | 17,256         | 15,706        | 7,058        | 22,764        | 21,002          | 10,380          | 31,383          | 29,185              | 16,430        | 45,615        |
| Higher Primary (Classes V-VII)                      | 3,338          | 829           | 4,167          | 4,308         | 1,229        | 5,536         | 6,299           | 2,259           | 8,558           | 9,789               | 3,866         | 13,615        |
| Lower Secondary (Classes VIII-X)                    | 1,551          | 259           | 1,809          | 2,204         | 474          | 2,677         | 3,250           | 841             | 4,091           | 5,294               | 1,562         | 6,856         |
| Higher Secondary (Classes XI-XII)                   | 230            | 33            | 263            | 294           | 66           | 360           | 447             | 92              | 539             | 991                 | 195           | 1,186         |
| Pre-University/Intermediate@ . . . . .              | 195            | 26            | 221            | 342           | 55           | 396           | 381             | 77              | 458             | 621                 | 136           | 757           |
| Undergraduate . . . . .                             | 75             | 12            | 87             | 126           | 25           | 151           | 236             | 64              | 299             | 439                 | 118           | 557           |
| Postgraduate & Research . . . . .                   | 15             | 2             | 18             | 23            | 4            | 28            | 41              | 10              | 51              | 69                  | 17            | 86            |
| Vocational Education (School Standard) . . . . .    | 149            | 41            | 191            | 214           | 66           | 280           | 339             | 86              | 425             | 530                 | 120           | 650           |
| Professional Education (College Standard) . . . . . | 86             | 5             | 90             | 140           | 9            | 149           | 239             | 26              | 265             | 370                 | 50            | 420           |
| Special Education (School Standard) . . . . .       | 132            | 18            | 150            | 182           | 33           | 215           | 162             | 36              | 197             | 185                 | 40            | 225           |
| Special Education (College Standard) . . . . .      | 6              | 2             | 7              | 9             | 3            | 12            | 15              | 7               | 22              | 23                  | 12            | 35            |
| <b>TOTAL</b> . . . . .                              | <b>*18,086</b> | <b>*6,201</b> | <b>*24,287</b> | <b>23,592</b> | <b>9,053</b> | <b>32,645</b> | <b>**32,508</b> | <b>**13,959</b> | <b>**46,467</b> | <b>47,026</b>       | <b>22,666</b> | <b>70,292</b> |

@ Includes enrolment in Classes XI and XII in U.P.

\* Includes 17,965 boys and 3,595 girls in Akhates (Vocational education school standard). These have been excluded in the revised consolidation.

\*\* Excludes 6,197 boys and 852 girls in NEPA and includes 2,842 boys and 1,485 girls in unrecognized institutions in Nagaland whose class-wise distribution is not available.

Note: Totals do not tally because of rounding.

## APPENDIX II

### RESOLUTION OF THE GOVERNMENT OF INDIA SETTING UP THE EDUCATION COMMISSION\*

AII.01. The Government of India, ever since the attainment of independence, have given considerable attention to the development of a national system of education rooted in the basic values and the cherished traditions of the Indian nation and suited to the needs and aspirations of a modern society. While some advances have been made in these directions, the educational system has not generally evolved in accordance with the needs of the times, and a wide and distressing gulf continues to persist between thought and action in several sectors of this crucial field of national activity. In view of the important role of education in the economic and social development of the country, in the building of a truly democratic society, in the promotion of national integration and unity, and above all, for the transformation of the individual in the endless pursuit of excellence and perfection, it is now considered imperative to survey and examine the entire field of education in order to realize within the shortest possible period a well-balanced, integrated and adequate system of national education capable of making a powerful contribution to all spheres of national life.

AII.02. The attainment of independence ushered in a new era of national development founded upon: the adoption of a secular democracy, not only as a form of government but also as a way of life; the determination to eliminate the poverty of the people and to ensure a reasonable standard of living for all, through modernization of agriculture and rapid development of industry; the adoption of modern science and technology and their harmonizing with traditional spiritual values; the acceptance of a socialistic pattern of society which will secure equitable distribution of wealth and equality of opportunity for all in education, employment and cultural advancement. Greater emphasis came to be placed on educational development because of the realization that education, especially in science and technology, is the most powerful instrument of social transformation and economic progress and that the attempt to create a new social order based on freedom, equality and justice can only succeed if the traditional educational system was revolutionized, both in content and extent.

AII.03. Quantitatively, education at all levels has shown a phenomenal development in the post-Independence period. In spite of this expansion, however, there is widespread dissatisfaction about several aspects of educational development. For instance, it has not yet been possible to provide free and universal education for all children up to 14 years of age. The problem of mass illiteracy continues to be immense. It has not been possible to raise standards adequately at the secondary and university stages. The diversification of

\*N. F.41 3(3)64-E.I. Ministry of Education, Government of India, New Delhi, the 14th of July 1964 as finally modified.

curricula in secondary and higher education has not kept pace with the times so that the problem of educated unemployment has been intensified on the one hand while, on the other, there is an equally acute shortage of trained manpower in several sectors. The remuneration and service conditions of teachers leave a great deal to be desired; and several important academic problems are still matters of intense controversies: In short, qualitative improvements in education have not kept pace with quantitative expansion, and national policies and programmes concerning the quality of education, even when these were well-conceived and generally agreed to, could not be implemented satisfactorily.

AII.04. The Government of India are convinced that education is the key to national prosperity and welfare and that no investment is likely to yield greater returns than investment in human resources of which the most important component is education. Government have also decided to mobilize all the resources of science and technology which can only be done on the foundation of good and progressive education and, to that end, to increase considerably their total investment in the development of education and scientific research. The nation must be prepared to pay for quality in education, and from the value attached to education by all sectors of the people it is clear that they will do so willingly.

AII.05. It is desirable to survey the entire field of educational development as the various parts of the educational system strongly interact with and influence one another. It is not possible to have progressive and strong universities without efficient secondary schools and the quality of these schools is determined by the functioning of elementary schools. What is needed, therefore, is a synoptic survey and an imaginative look at education considered as a whole and not fragmented into parts and stages. In the past, several commissions and committees have examined limited sectors and specific aspects of education. It is now proposed to have a comprehensive review of the entire educational system.

AII.06. While the planning of education for India must necessarily emanate from Indian experience and conditions, Government of India are of the opinion that it would be advantageous to draw upon the experience and thinking of educationists and scientists from other parts of the world in the common enterprise of seeking for the right type of education which is the quest of all mankind, specially at this time when the world is becoming closely knit together in so many ways. It has, therefore, been decided to associate with the Commission, either as members or as consultants, some eminent scientists and educationists from other countries. The United Nations Educational, Scientific and Cultural Organization has provided three members for the Commission, viz., Mr. Jean Thomas, Inspector General of Education, France, and formerly Assistant Director General of UNESCO, Prof. Shumovsky, Director, Methodological Division, Ministry of Higher and Special Secondary Education, RSFSR, Moscow, and Professor of Physics, Moscow University, and Prof. Sadatoshi Ihara, Professor of the First Faculty of Science and Technology, Waseda University, Tokyo, who have since joined the Commission. It is expected that the collaboration of some eminent scientists and educationists, as consultants, with the work of the Commission, will also be forthcoming.

Negotiations are in progress with some more specialists and additions of names of foreign consultants will be notified from time to time. In addition, the Commission has been authorized to invite from time to time such other consultants in India in relation to any aspect of its enquiry as it may consider necessary.

AII.07. For the purposes outlined in the foregoing paragraphs, Government of India have decided to set up an Education Commission consisting of the following members:

#### **Chairman**

1. Prof. D. S. Kothari, Chairman, University Grants Commission, New Delhi.

#### **Members**

2. Shri A. R. Dawood, former Director, Extension Programmes for Secondary Education, New Delhi.

3. Mr. H. L. Elvin, Director, Institute of Education, University of London, London.

4. Shri R. A. Gopaldaswami, Director, Institute of Applied Manpower Research, New Delhi.

5. Dr. V. S. Jha, former Director of the Commonwealth Education Liaison Unit in London.

6. Shri P. N. Kirpal, Educational Adviser to the Government of India, New Delhi.

7. Prof. M. V. Mathur, Professor of Economics and Public Administration, University of Rajasthan, Jaipur.

8. Dr. B. P. Pal, Director, Indian Agricultural Research Institute, New Delhi.

9. Kumari S. Panandikar, Head of the Department of Education, Karnatak University, Dharwar.

10. Prof. Roger Revelle, Dean of Research, University of California, USA

11. Dr. K. G. Saiyidain, former Educational Adviser to the Government of India, New Delhi.

12. Dr. T. Sen, Rector, Jadavpur University, Calcutta.

13. Mr. Jean Thomas, Inspector General of Education, France, and formerly Assistant Director-General of UNESCO.

14. Prof. S. A. Shumovsky, Director, Methodological Division, Ministry of Higher and Special Secondary Education, RSFSR, Moscow, and Professor of Physics, Moscow University.

15. Prof. Sadatoshi Ihara, Professor of the First Faculty of Science and Technology, Waseda University, Tokyo.

#### **Member-Secretary**

16. Shri J. P. Naik, Head of the Department of Educational Planning, Administration and Finance, Gokhale Institute of Politics and Economics, Poona.

#### **Associate Secretary**

17. Mr. J. F. McDougall, Assistant Director, Department of School and Higher Education, UNESCO, Paris.

AII.08. The Commission will advise Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all its aspects. It need not, however, examine the problems of medical or legal education, but such aspects of these problems as are necessary for its comprehensive enquiry may be looked into.

AII.09. The Commission will submit its final report as early as possible and not later than the 31st March, 1966. Where immediate implementation of certain programmes is necessary the Commission may also submit, from time to time, interim reports dealing with limited sectors on problems of education. Government are anxious that the implementation of agreed recommendations about specific matters of importance shall on no account be held up until the completion of the Commission's work. On the other hand its expert advice and guidance should be continuously available to those charged with the responsibility for implementing educational programmes and policies.

Ordered that a copy of the Resolution be communicated to all State Governments and Administrations of Union Territories and to all Ministries of the Government of India.

Ordered also that the Resolution be published in the Gazette of India for information.

**PREM KIRPAL**

Secretary to the Government of India

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### **APPENDIX III**

#### **CONSULTANTS TO THE EDUCATION COMMISSION**

1. Dr. James E. Allen, Jr., Commissioner, State Education Department, and President, University of the State of New York, New York, USA.
2. Dr. C.E. Beeby, Visiting Professor, Centre for Studies in Education and Development, Graduate School of Education, Harvard University, Cambridge, Massachusetts, USA.
3. Prof. P.M.S. Blackett, President of the Royal Society, UK, and Professor of Physics, Imperial College of Science and Technology, University of London, London.
4. Recteur J.J. Capelle, Professor, University of Nancy, and former Director-General of Education in France, Paris.
5. Sir Christopher Cox, Educational Adviser, Ministry of Overseas Development, UK, and Fellow, New College, Oxford.
6. Dr. Philip H. Coombs, Director, UNESCO International Institute for Educational Planning, Paris.
7. Prof. Andre Daniere, Centre for Studies in Education and Development, Graduate School of Education, Harvard University, Cambridge, Massachusetts, USA.
8. Prof. S. Dedijer, Institute of Sociology, University of Lund, Sweden.
9. Dr. Nicholas DeWitt, Director, International Survey of Educational Development and Planning, Indiana University, Bloomington, Indiana, USA.
10. Dr. John Guy Fowlkes, School of Education, University of Wisconsin, Madison, USA.
11. Sir Willis Jackson, Head of the Department and Professor of Electrical Engineering, Imperial College of Science & Technology, University of London, London.
12. Dr. J. Paul Leonard, Professor of Education, Columbia University Teachers' College, and Chief of Party, Columbia University Team in India, New Delhi.
13. Dr. Gordon N. Mackenzie, Professor of Education, Teachers' College, Columbia University, New York, USA.
14. Professor C. A. Moser, Director, Unit for Economic and Statistical Studies on Higher Education, London School of Economics and Political Science, London.

15. Prof. S. Okita, Executive Director, Japan Economic Research Centre, Tokyo, and Special Adviser to the Minister of Economic Planning Agency, Government of Japan.
16. Professor A.R. Prest, Professor of Economics and Public Finance, University of Manchester, Manchester, England.
17. Lord Robbins, Professor Emeritus, London School of Economics, and Chairman of Financial Times, London. Recently Chairman of the Committee on Higher Education, UK.
18. Professor Edward A. Shils, Professor of Sociology and Social Thought in the Committee on Social Thought, University of Chicago, USA, and Fellow of King's College, Cambridge, UK.
19. Dr. Frederick Seitz, President, National Academy of Sciences, Washington, USA.
20. Professor W.C. Smith, Professor of World Religions and Director, Centre for the Study of World Religions, Harvard University, Cambridge, Massachusetts, USA.

## APPENDIX IV

### TASK FORCES AND WORKING GROUPS

#### AIV.01 Task Force on Adult Education

1. Dr. V. S. Jha, Member, Education Commission, New Delhi. Convener
2. Shri Abdul Qadir, Director-General of Employment & Training, Ministry of Labour & Employment, New Delhi.
3. Shri G. K. Chandiramani, Additional Secretary, Ministry of Education, New Delhi.
4. Shri A. R. Deshpande, Adviser (Social Education), Ministry of Education, New Delhi.
5. Shrimati Durgabai Deshmukh, Vice-Chancellor's Residence, Delhi University, Delhi.
6. Mrs. Welthy Fisher, Literacy House, Kanpur Road, Lucknow.
7. Shri K. L. Joshi, Secretary, University Grants Commission, New Delhi.
8. Shri D. R. Kalia, Director, Delhi Public Library, Delhi.
9. Dr. T. A. Koshy, Director, National Fundamental Education Centre, 38-A, Friends Colony (East), Mathura Road, New Delhi.
10. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
11. Dr. M. S. Mehra, Vice-Chancellor, Rajasthan University, Jaipur.
12. Mrs. A. R. Moore, Regional Adviser on Health Education, World Health Organization, WHO House, Ring Road, New Delhi.
13. Shri J. P. Naik, Member-Secretary, Education Commission. New Delhi.
14. Dr. M. S. Randhawa, Special Secretary, Ministry of Food & Agriculture (Department of Agriculture), New Delhi.
15. Dr. K. G. Saiyidain, Member, Education Commission, New Delhi.
16. Dr. Hans Simons, Ford Foundation, 32, Feroze Shah Road, New Delhi.
17. Shri Sohan Singh, Asia Foundation, 29, Rajpur Road, Delhi.



18. Dr. S. M. S. Chari, Deputy Educational Adviser, Education Commission, New Delhi.  
Secretary

### **Sub-Group on Literacy Education**

#### **MEMBERS**

1. Mrs. Durgabai Deshmukh, Vice-Chancellor's Residence, University of Delhi, Delhi.  
Convener
2. Shri A. R. Deshpande, Adviser (Social Education), Ministry of Education, New Delhi.
3. Dr. T. A. Koshy, Director, National Fundamental Education Centre, New Delhi.
4. Shri Mustaq Ahmed, Director, Literacy House, Lucknow.
5. Shri H. P. Saxena, Assistant Director, National Fundamental Education Centre, New Delhi.

### **Sub-Group on Role of Universities and Institutions of Higher Learning in Adult Education**

#### **MEMBERS**

1. Shri Sohan Singh, Asia Foundation, New Delhi. Convener
2. Shri Bashiruddin, 33-A, Kasturba Gandhi Marg, Allahabad.
3. Dr. Nagendra, Chairman, University Extension Lectures Board, University of Delhi, Delhi.
4. Dr. K. G. Saiyidain, Member, Education Commission, New Delhi.
5. Dr. Hans Simons, Ford Foundation, New Delhi.
6. Shri Uma Shankar, Director, Adult Education Department, Rajasthan University, Jaipur.

### **Sub-Group on Education of Workers**

#### **MEMBERS**

1. Dr. T. A. Koshy, Director, National Fundamental Education Centre, Friends Colony, New Delhi. Convener

2. Shri Abdul Qadir, Director-General, Employment and Training, Ministry of Labour and Employment, New Delhi.
3. Shri N. Bhadriah, President, Mysore State Adult Education Council, Mysore.
4. Shri L. S. Chandrakant, joint Educational Adviser, Ministry of Education, New Delhi.
5. Shri Chenstal Rao, Secretary, Federation of Indian Chambers of Commerce and Industry, New Delhi.
6. Shri S. C. Datta, Secretary, Indian Adult Education Association, Indraprastha Estate, New Delhi.
7. Shri M. C. Nanavatty, Director (Social Education), Ministry of Food and Agriculture, New Delhi.
8. Shri Annasaheb Sahasrabuddhe, Chairman, Rural Industries Planning, Planning Commission, New Delhi.
9. Dr. R. K. Singh, Director, Rural Institute, Bichpuri (Agra), U.P.

#### **Sub-Group on Role of Cultural Institutions in Adult Education**

##### **MEMBERS**

1. Shri D. R. Kalia, Director, Delhi Public Library, Delhi. Convener
2. Shrimati Kamladevi Chattopadhyay, Chairman, All- India Handicrafts Board, Wellington Crescent, New Delhi.
3. Shri J. C. Mathur, joint Secretary, Ministry of Food and Agriculture, New Delhi.
4. Dr. Grace Morley, Director, National Museum, New Delhi.
5. Dr. Mulk Raj Anand, Panjab University, Chandigarh.
6. Dr. M. S. Randhawa, Special Secretary, Ministry of Food and Agriculture, New Delhi.

#### **AIV.02. Task Force on Agriculture Education**

1. Dr. B. P. Pal, Director-General and Vice- President, I.C.A.R. and Additional Secretary, Ministry of Food and Agriculture, New Delhi. Convener
2. Dr. Amir Ali, Director, Rural Institute, Jamia Millia, Jamia Nagar, New Delhi.
3. Dr. Anant Rao, Dean, U.P. Agricultural University, Pant Nagar.

4. Dr. Chintamani Singh, Dean, Veterinary College, Punjab Agricultural University, Hissar.
5. Dr. R. W. Cummings, Field Director, Rockefeller Foundation Programme in India, 17, Kautilya Marg, Chanakyapuri, New Delhi-21.
6. Prof. V. M. Dandekar, Centre for Advanced Study in Agricultural Economics, Gokhale Institute of Politics and Economics, Poona.
7. Dr. K. C. Kanungo, Head of the Division of Agricultural Economics, Indian Agricultural Research Institute, New Delhi.
8. Dr. A. B. Joshi, Dean and Deputy Director (Education), Indian Agricultural Research Institute, New Delhi.
9. Managing Director, Banana and Fruit Development Corporation, 7, 1st Main Road, C.I.T. Colony, Madras.
10. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
11. Dr. S. N. Mehrotra Deputy Secretary, Education Department, Government of Uttar Pradesh, Lucknow.
12. Dr. S. K. Mukherji, Deputy Agricultural Commissioner, Indian Council of Agricultural Research, Krishi Bhavan, New Delhi.
13. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
14. Dr. K. C. Naik, Vice-Chancellor, University of Agricultural Science, 9-XI Main, 16th Cross, Malleswaram, Bangalore-3.
15. Dr. N. K. Panikar, Director, Indian Programme, Indian Ocean Expedition, C.S.I.R., New Delhi.
16. Shri C. S. Ranganathan, Fertilizer Association of India, New Delhi.
17. Dr. S. C. Verma, Field Adviser (Agriculture), N.C.E.R.T., New Delhi.
18. Shri S. Ramanujam, Assistant Educational Adviser, Education Commission, New Delhi. Secretary

#### **AIV.03. Task Force on Educational Administration**

1. Shri Prem Kirpal, Secretary, Ministry of Education and Member, Education Commission, New Delhi. Secretary

2. Shri A. C. Deve Gowda, Director, Directorate of Extension Programmes for Secondary Education (N.C.E.R.T.). 7, Lancer Road, Timarpur, Delhi-6.
3. Dr. V. Jagannadham, Professor of Social Administration, Indian Institute of Public Administration, Indraprastha Estate, New Delhi.
4. Prof. M. V. Mathur, Member, Education Commission, New Delhi.
5. Dr. S. Misra, Director of Public Instruction, Orissa (now Vice-Chancellor, Utkal University), Cuttack
6. Dr. S. N. Mukherjee, Head of the Department of Educational Administration, (N.C.E.R.T.), B-2/6A, Model Town, Delh-9.
7. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
8. Shri H. M. Patel, Chairman, Charotar Vidya Mandal, Vallabh Vidyanagar, via Anand (Gujarat).
9. Dr. D. M. Sen, Education Secretary, West Bengal, (now Vice-Chancellor, Burdwan University), Calcutta.
10. Shri J. D. Sharma, Director of Public Instruction, Punjab, Chandigarh.
11. Shri V. D. Sharma, Education Secretary, Rajasthan, Jaipur.
12. Dr. Rudra Dutt Singh, Head of the Research Project on Panchayati Raj Institutions, Indian Institute of Public Administration, Indraprastha Estate, New Delhi.
13. Miss S. Rajan, Assistant Educational Adviser, Education Commission, New Delhi. Secretary

#### **AIV.04. Task Force on Educational Finance**

1. Prof. M. V. Mathur, Member, Education Commission, New Delhi. Convener
2. Shri D. A. Dabholkar, Principal, Chintamanrao College of Commerce, Sangli (Maharashtra).
3. Dr. B. Dutta, Education Secretary, Government of West Bengal, Calcutta.
4. Shri R. A. Gopaldaswami, Member, Education Commission, New Delhi.
5. Shri K. L. Joshi, Secretary, University Grants Commission, New Delhi.

6. Dr. D. T. Lakdawala, Head of the Department of Economics, University of Bombay, Bombay-1.
7. Dr. Gautam Mathur, Head of the Department of Economics, Osmania University, Hyderabad.
8. Dr. Atmanand Misra, Director of Public Instruction, Madhya Pradesh, Bhopal.
9. Dr. Sadashiv Misra, Director of Public Instruction, (now Vice-Chancellor, Utkal University), Cuttack, Orissa.
10. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
11. Dr. K. A. Naqvi, Delhi School of Economics, University of Delhi, Delhi.
12. Dr. Pritam Singh, Director, National Council of Applied Economic Research, New Delhi.
13. Shri Gurbax Singh, Assistant Educational Adviser, Education Commission, New Delhi. Secretary

#### **AIV.05. Task Force on Higher Education**

1. Dr. K. G. Saiyidain, Member, Education Commission, New Delhi Convener
2. Shri j. W. Airan, Principal, Wilson College, Bombay-7.
3. Shri P. K. Bose, Principal, Bangabasi College, Calcutta.
4. Shri Chandrahasan, Head of the Department of Hindi, University of Kerala, Ernakulam.
5. Dr. V. S. Jha, Member, Education Commission, New Delhi.
6. Dr. A. C. Joshi, Adviser, Planning Commission, New Delhi.
7. Shri K. L. Joshi, Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.
8. Shri C. L. Kapur, Retired Director of Education and Education Secretary, Punjab, IE/5, Patel Road, Patel Nagar, New Delhi-12.
9. Dr. D. S. Kothari, Chairman, Education Commission and University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.
10. Prof. M. V. Mathur, Member, Education Commission, New Delhi.

11. Shri P. G. Mavlankar, Principal, L. D. Arts College, Navrangpura, Ahmedabad.
12. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
13. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
14. Dr. P. J. Philip, joint Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.
15. Shri A. B. Shah, Executive Secretary, Indian Committee for Cultural Freedom, Army and Navy Building, 148, Mahatma Gandhi Road, Bombay-1.
16. Dr. Hans Simons, Consultant in General Education, Ford Foundation, 32, Feroze Shah Road, New Delhi-1.
17. Dr. Amrik Singh, Secretary, Inter-University Board of India and Ceylon, 1, Rouse Avenue, New Delhi.
18. Dr. R. K. Singh, Director, Balwant Vidyapeeth Rural Higher Institute, Bichpuri, Agra (U.P.).
19. Dr. H. J. Taylor, Principal, Union Christian College, Barapani, Shillong (Assam).
20. Miss. S. Rehman. Assistant Educational Adviser, Education Commission, New Delhi.  
Secretary

### **SPECIAL INVITEES**

1. Dr. C. Gilpatric, Visiting Professor of Philosophy, University of Delhi (The Rockefeller Foundation), Delhi-7.
2. Dr. M. S. Mehta, Vice-Chancellor, Rajasthan University, Jaipur.
3. Prof. M. Mehrotra, 43, Lal Quarters, Govinda Nagar, Kanpur-6.

### **Sub-Group on Equalization of Educational Opportunities at University Level**

1. Dr. R. K. Singh, Director, Balwant Vidyapeeth Rural Higher Institute, P.O. Bichpuri (Agra). Convener
2. Shri K. L. Joshi, Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.
3. Shri P. G. Mavlankar, Principal, L. D. Arts College, Navrangpura, Ahmedabad-9.
4. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.

5. Shri A. P. Shah, Executive Secretary, Indian Committee for Cultural Freedom, Army and Navy Building, 148, Mahatma Gandhi Road, Bombay-1.

#### **Sub-Group on Rural Higher Education**

1. Shri G. Ramachandran, Director, Gandhigram, Gandhigram P.O., Madurai District (Madras). Convener

2. Dr. H. Amir Ali, Director, Jamia Rural Institute, Jamia Millia Islamia, P.O. Jamia Nagar, New Delhi-25.

3. Shri K. L. Bordia, Director, Vidya Bhavan Rural Institute, Udaipur (Rajasthan).

4. Dr. V. S. Jha, Member, Education Commission, New Delhi.

5. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.

#### **Sub-Group on Salaries of Teachers**

1. Shri K. L. Joshi, Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1. Convener

2. Dr. C. Gilpatric, Visiting Professor of Philosophy, University of Delhi, (The Rockefeller Foundation), Delhi-7.

3. Shri C. L. Kapur, Retired Director of Education and Education Secretary, Punjab, IE/5, Patel Road, Patel Nagar, New Delhi-12.

4. Prof. S. A. Shumovsky, Member, Education Commission.

#### **Sub-Group on University Standards**

1. Dr. P. J. Philip, joint Secretary University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.

2. Shri J. W. Airan, Principal, Wilson College, Bombay-7.

3. Shri A. R. Dawood, Member, Education Commission, New Delhi.

4. Dr. V. S. Jha, Member, Education Commission, New Delhi.

5. Shri M. N. Kapur, Principal, Modern School, New Delhi.

6. Shri C. L. Kapur, Retired Director of Education and Education Secretary, Punjab, IE/5, Patel Road, Patel Nagar, New Delhi-12.

7. Shri A. B. Shah, Executive Secretary, Indian Committee for Cultural Freedom, Army and Navy Building, 148, Mahatma Gandhi Road, Bombay-1.

### **Sub-Group on Evaluation at University Level**

1. Dr. K. G. Saiyidain, Member, Education Commission, New Delhi. Convener
2. Dr. R. H. Dave, Deputy Director (Examination Unit), Directorate of Extension Programmes for Secondary Education (N.C. E.R.T.), 7, Lancer Road, Timarpur, Delhi-9.
3. Dr. V. S. Jha, Member, Education Commission, New Delhi.
4. Dr. A. C. Joshi, Adviser, Planning Commission, Yojana Bhavan, Parliament Street, New Delhi-1.
5. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
6. Shri Shantinarayan, Principal, Hans Raj College, Delhi.
7. Shri Ishwarbhai Patel, Vice-Chancellor, Sardar Vallabhbhai Vidyapeeth, Vallabh Vidya Nagar (via Anand).
8. Dr. Hans Simons, Consultant in General Education, The Ford Foundation, 32 Feroz Shah Road, New Delhi-1.
9. Dr. H. J. Taylor, Principal, Union Christian College, Barapani, Shillong.

### **Sub-Group on the Functions of a University**

1. Dr. C. Gilpatric, Visiting Professor of Philosophy, University of Delhi, (The Rockefeller Foundation), Delhi-7. Convener
2. Dr. V. S. Jha, Member, Education Commission, New Delhi.
3. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
4. Dr. R. K. Singh, Director, Balwant Vidyapeeth Rural Higher Institute, P.O. Bichpuri (Agra).

### **Sub-Group on Policy of Admissions and Sub-standard Institutions**

1. Dr. V. S. Jha, Member, Education Commission, New Delhi. Convener
2. Dr. C. Gilpatric, Visiting Professor of Philosophy, University of Delhi (The Rockefeller Foundation), Delhi-7.



3. Shri C. L. Kapur, Retired Director of Education and Education Secretary, Punjab, IE/5, Patel Road, Patel Nagar, New Delhi-12.

4. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.

5. Dr. R. K. Singh, Director, Balwant Vidyapeeth Rural Higher Institute, P.O. Bichpuri (Agra).

#### **AIV.06. Task Force on Manpower**

1. Shri R. A. Gopaldaswami, Member, Education Commission, New Delhi. Convener

2. Shri Abdul Qadir, Director-General, Employment and Training, New Delhi.

3. Shri K. L. Joshi, Secretary, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi-1.

4. Prof. M. V. Mathur, Member, Education Commission, New Delhi.

5. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.

6. Shri R. Prasad, Director, Manpower, Ministry of Home Affairs, (now Development Commissioner, Bihar), New Delhi.

7. Dr. T. Sen, Member, Education Commission, New Delhi.

8. Dr. S. P. Aggarwal, Head of Division, Area Manpower, Institute of Applied Manpower Research, Indraprastha Estate, New Delhi.

#### **AIV.07. Task Force on Techniques and Methods in Education**

1. Dr. V. S. Jha, Member, Education Commission, New Delhi. Convener

2. Shri G. K. Athalye-later Shri S. L. Ahluwallia, Director, National Institute of Audio-Visual Education (N.C.E.R.T.), Indraprastha Estate, New Delhi.

3. Shri M. L. Bharadwaj, Director, Advertising and Visual Publicity, Ministry of Information and Broadcasting, 'B' Block, Curzon Road, New Delhi.

4. Shri A. R. Dawood, Member, Education Commission, New Delhi.

5. Dr. (Miss) S. Dutt, Reader in Education, Central Institute of Education, N.C.E.R.T., 33, Chhatra Marg, Delhi-6.

6. Shri C. L. Kapur, IE/5 Patel Road, Patel Nagar, New Delhi-12.

7. Dr. S. S. Kulkarni, Psychometrician, Department of Psychological Foundations, N.C.E.R.T., 2/3, Model Town, Delhi-9.
8. Shri J. C. Mathur, joint Secretary, Ministry of food and Agriculture (Department of Agriculture), Krishi Bhavan, New Delhi.
9. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
10. Dr. S. K. Mitra, Head of the Department of Psychological Foundations, N.C.E.R.T., 2/3, Model Town, Delhi-9.
11. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.
12. Dr. Paul Neurath, Ford Foundation Consultant, Educational Television, 222, Jor Bagh, New Delhi.
13. Miss S. Panandikar, Member, Education Commission, New Delhi.
14. Dr. Albert J. Perrelli, Expert, Central Institute of Education, N.C.E.R.T., 33, Chhatra Marg, Delhi-6.
15. Miss S. Rehman, Assistant Educational Adviser, Education Commission, New Delhi.
16. Mr. J. M. Ure-later Mr. D. A. Smith, Chief Education Officer, British Council, 21, Jor Bagh, New Delhi.
17. Dr. S. M. S. Chari, Deputy Educational Adviser, Education Commission, New Delhi. Secretary

#### **AIV.08. Task Force on Professional, Vocational and Technical Education**

1. Dr. T. Sen, Member, Education Commission, New Delhi. Convener
2. Prof. S. K. Bose, Director, Indian Institute of Technology, Powai, Bombay.
3. Shri G. K. Chandiramani, Additional Secretary, Ministry of Education, New Delhi.
4. Shri L. S. Chandrakant, joint Educational Adviser, Ministry of Education, New Delhi.
5. Dr. D. R. Dhingra, 3/40, Vishnupuri, Nawabganj, Kanpur.
6. Shri R. N. Dogra, Director, Indian Institute of Technology, Hauz Khas, New Delhi.
7. Prof. V. G. Garde, Principal, Malaviya Regional Engineering College, Jaipur (Rajasthan).

8. Shri R. A. Gopaldaswami, Member, Education Commission, New Delhi.
9. Shri K. L. Joshi, Secretary, University Grants Commission, New Delhi.
10. Dr. P. K. Kelkar, Director, Indian Institute of Technology, Kanpur.
11. Mr. J. F. McDougall, Associate Secretary, Education Commission, New Delhi.
12. Col. S. G. Pendse, Director of Training, Directorate General of Employment and Training, New Delhi.
13. Shri S. C. Sen, Principal, Delhi College of Engineering, Delhi.
14. Shri R. K. Srivastav, Deputy Secretary, Directorate of Manpower, Ministry of Home Affairs, New Delhi.
15. Dr. H. C. Visvesvaraya, Deputy Director, Indian Standard Institute, New Delhi.
16. Shri S. Venkatesh, Deputy Educational Adviser, Education Commission, New Delhi.  
Secretary

#### **AIV.09. Task Force on Science Education**

1. Dr. D. S. Kothari, Chairman, Education Commission, New Delhi. Convener
2. Prof. S. Deb, Head of the Department of Geology, Jadavpur University, Jadavpur.
3. Prof. B. D. Jain, Professor of Chemistry, Delhi University, Delhi.
4. Miss P. Florence Nightingale, Lecturer, Science Education Unit, Hyderabad.
5. Prof. R. C. Paul, Head of the Department of Chemistry, Panjab University, Chandigarh.
6. Dr. R. N. Rai, Head of the Department of Science Education, N.C.E.R.T., H-2/3, Model Town, Delhi-9.
7. Prof. T. S. Sadasivan, Director, Centre of Advanced Study in Botany, Madras University, Madras.
8. Dr. D. Shankernarayan, Development Officer, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi.
9. Prof. Shantinarayan, Principal, Hansraj College, Delhi.
10. Dr. A. R. Verma, Director, National Physical Laboratory, New Delhi.

11. Dr. R. D. Deshpande, Development Officer, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi. Secretary

12. Shri I. C. Menon, Education Officer, University Grants Commission, Bahadur Shah Zafar Marg, New Delhi. Secretary

#### **AIV. 10. Task Force on School Education**

1. Shri A. R. Dawood, Member, Education Commission, New Delhi. Convener

2. Shri K. L. Gupta, Principal, M.B. Intermediate College, Brindaban.

3. Dr. G. S. Khair, Principal, Poona Anath Vidarthi Griha, Sadashiv Peth, Poona-2.

4. Shri K. Kuruvila Jacob, Principal, The Hyderabad Public School, Begumpet, Hyderabad-16.

5. Dr. D. R. Mankad, Secretary, Gangajala Vidyapith, Aliabad, Jamnagar (Gujarat).

6. Shri P. N. Mathar, Banasthali Vidyapeeth, Banasthali (Jaipur).

7. Dr. (Mrs.) R. Muralidharan, Reader, Department of Psychological Foundations, N.C.E.R.T., H-2/6, Model Town, Delhi-9.

8. Shri J. P. Naik, Member-Secretary, Education Commission, New Delhi.

9. Miss S. Panandikar, Member, Education Commission, New Delhi.

10. Shri H. Radhakrishna, Secretary, Akhil Bharat Sarva Seva Sangh, Rajghat, Varanasi-1.

11. Dr. S. N. Saraf, Director, Education Division, Planning Commission, New Delhi.

12. Shrimati S. Doraiswami, Assistant Educational Adviser, Education Commission, New Delhi. Secretary

#### **Sub-Group on Secondary Education**

1. Shri A. R. Dawood, Member, Education Commission, New Delhi. Convener

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