

RESTRICTED CIRCULATION

**REPORT OF
THE STEERING GROUP
ON
EDUCATION, CULTURE AND SPORTS
FOR THE SEVENTH FIVE YEAR PLAN (1985-90)**



PLANNING COMMISSION

**GOVT OF INDIA
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P R E A M B L E

Despite the many significant achievements of Education over the several Plans, there are still many goals and tasks to be achieved and many deficiencies yet to be remedied. Besides, there are high hopes and expectations from Education and its contribution towards national integration and national development. Despite these expectations education has been a sector which has continuously faced severe constraint of resources in the face of exploding numbers and demands. It is, in this context, that this report for Educational Development has been drawn up as part of the Seventh Five Year Plan. The broad approaches and strategies in this regard have been approved by the National Development Council. The Planning Commission had constituted the Steering Group on Education, Culture and Sports in the Seventh Five Year Plan to draw up the programme to be undertaken in the next five years. (For constitution please see Appendix-I). Twelve working Groups were also constituted by the Planning Commission for different sub-sectors of Education, Culture and Sports as under :-

1. Elementary Education
2. Secondary Education
3. University Education
4. Technical Education
5. Adult Education
6. Languages
7. Educational Technology and Distant Learning
8. Art and Culture
9. Library Services and Informatics
10. Sports and Youth Services
11. Monitoring and Evaluation
12. Resources

In addition, requirements of scholarships were separately assessed and the recommendations of the Working Group on Book-Promotion set-up by the Ministry of Education were taken note of. There were also other Working Groups set up by the Planning Commission such as for Scheduled Castes and Scheduled Tribes. A large number of educationists, planners, administrators, official and non-official experts were members of the above groups.

The Steering Group held three meetings when it had detailed discussions on various issues. It had the benefit of guidance of Prof. M.G.K. Menon, Member (Education). The Steering Group also had a very useful interaction with the Chairman and Members of the two National Commission on Teachers. The various Working Groups and Sub-groups on Education did commendable work and the experts of these Groups as well as those of the Steering Group participated actively in various discussions. Based on the discussions and the reports of the various Groups and Sub-groups, the Steering Group has attempted in this report to prepare a balanced programme of development in the Seventh Five Year Plan, keeping in view the approach to the Seventh Five Year Plan 1985-90 as approved by the National Development Council.

Elementary Education and Adult Education form part of the 20-Point Programme as well as the Minimum Needs Programme. They have, therefore, received a high priority in the proposals of the Steering Group. While the objective of 'Mass Education' has to be achieved by 1990 through universalisation of elementary education and mass campaign for removal of illiteracy in the age group 15-35, emphasis is to be attached to improvement in the quality of education and its relevance at all levels. It is also envisaged that during the Seventh Plan all the State Governments/Union Territories would take necessary steps to introduce vocational courses for which central assistance through provision of funds would be necessary. Another area which would receive special thrust during the Seventh Plan, is the use of the electronic media in particular the potential of INSAT-IB for education leading to improvement of standards of teaching in science, mathematics and also training of teachers. The Steering Group has also kept in view that a balanced and integrated programme of Education, Culture and Sports is of crucial importance and that the criteria of relevance, quality, efficiency and equity have to be given their due weight. For the first time, separate sections on Resource Mobilisation and Informatics and Educational Technology have been included. There is also the much needed thrust on programmes for development of women, minorities and Scheduled Castes and Scheduled Tribes. A special focus of the report is on implementation, and community and user involvement as an important strategy for effective implementation.

I wish to place on record my deep appreciation of the valuable contribution made by the Chairmen and members of the various Working Groups and the members of the Steering Group.

SERLA GREWAL
Secretary
Ministry of Education & Culture

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CHAPTER I

OVER-VIEW OF EDUCATIONAL DEVELOPMENT

Plans in Retrospect

The promotion of education on meaningfully systematic lines was taken up in 1951 with the initiation of planned economic and social development. The successive plans emphasized the significant role that education could play in bringing about social and economic changes. The First Five Year Plan (1951-56) emphasized the relevance of mass education in democracy which requires intelligent participation of the masses in the affairs of the country. The Second Five Year Plan (1956-61) stated that education had a determining influence on the rate at which economic progress could be achieved and the benefits derived from it. The Third Five Year Plan (1961-66) felt that education was the single most important factor in achieving rapid economic development and technological progress and also in creating a social order founded on the values of freedom, social justice and equal opportunity. The Fourth Five Year Plan (1969-74) emphasised the need to remove deficiencies of the education system and to link it more purposefully with increasing demands of social and economic development. The Fifth Five Year Plan (1974-79) assigned to education a crucial role. It stated that as a key factor in production, education helped to supply the man-power of requisite quality and number and also helped to inculcate in the masses appropriate attitudes, skills and personally traits.

2. The Sixth Five Year Plan (1980-85) has assigned to education the important task of human resources development. The plan has laid stress on the provision of facilities for mass education through universalisation of elementary education and eradication of adult illiteracy. Consistent with the goal of alleviating unemployment, the plan envisaged increasing the practical bias in secondary education, vocationalization of higher secondary stage and restructuring of undergraduate courses. In technical education provision was made for the identification of emergent technological tasks for which manpower would have to be trained. The main objective of the plan in education was to enable all citizens to acquire literacy, numeracy, computational skills, basic understanding of the environment and functional skills of relevance to daily life. It was expected that with these, it would be possible to establish a dynamic and beneficent link between education, employment and development with due regard for the economic and social progress of the community.

Quantitative Expansion

3. With the implementation of various programmes included in the Six Five Year Plans, a phenomenal expansion has taken place in the facilities available for education. The number of institutions, students enrolled in them and investments in education have shown substantial increases. The increases that have taken place are discussed below briefly:

Institutions

4. As the table below indicates, the number of recognised educational institutions has increased many times between 1951-85:

Institutions	Year				
	1950-51 (Actual)	1960-61 (Actual)	1970-71 (Actual)	1980-81 (Actual)	1984-85 (Likely)
1. Primary	2,09,671	3,30,399	4,08,378	4,85,538	5,50,000
2. Middle	13,596	49,663	90,621	1,16,447	1,40,000
3. High/Higher Secondary	7,288	17,257	36,738	51,594	60,000
4. Colleges					
a) Art, Science & Commerce	548	1,161	2,587	3,393	3,500
b) Professional	147	381	1,017	1,382	1,500
c) Universities & Deemed Universities	28	44	93	123	135

The number of primary schools has increased from 2.09 lakhs in 1951 to 5.5 lakhs at present. Institutions providing middle school and Secondary education have grown many times -- nearly ten times in the case of the former and more than nine times in the case of the latter. Similarly, the number of colleges has increased seven times during the period.

ENROLMENT

5. As in the case of institutions, enrolment at different stages of education has shown substantial increase in the past 34 years of planned economic development as the table below illustrates :

Enrolment By Stages (in '000)	Year				
	1950-51	1960-61	1970-71	1980-81	1984-85
i) Primary (I-V Classes)	19,155 (42.6)	34,994 (62.4)	57,045 (76.4)	72,688 (83.1)	84,766 (97.6)
ii) Middle I-VIII Classes	3,120 (12.7)	6,705 (22.5)	13,315 (34.2)	19,846 (40.0)	Targets 27,383 (51.9)
iii) High/Higher Sec./Intermediate	1,481	3,483	7,167	11,281	13,490
iv) University & above (1st Degree)	174	557	1,956	2,752	3,442

(Figures in parenthesis indicate enrolment as percentage of the population in the age group)

The total enrolment at different stages of education has increased from 24 million in 1950-51 to about 129 million in 1984-85. The rate of growth in enrolment has been much higher at second and third levels of education. While overall annual compound rate of growth in enrolment at primary stage has been 4.3% during 1981-85, it has been 6.4% at the middle stage, 6.5% at the high/higher secondary stage and 8.9% at the collegiate stage. If we compute the rate of growth in enrolment in the last 5 years, the rates of growth works out to 3.1% at primary stage, 6.6% at the middle school stage, 3.6% at the secondary stage and about 6% at the collegiate stage.

6. The establishment of a net work of educational institutions has helped to a great extent in providing educational facilities nearer to the homes of pupils. In the case of the under privileged sections of the population, particularly, the Scheduled Castes and Scheduled Tribes, enrolments have increased considerably, indicating thereby increased access to educational facilities as the table below illustrates:

Stage of Instruction	Percentage coverage				
	Boys	Girls	All Commu- nities	Scheduled Castes	Scheduled Tribes
Primary (I-V Classes)					
1951	59.8	24.6	42.6	11.7*	5.3*
1981	99.4	66.9	83.7	86.0	73.7
Middle (VI-VIII)					
1951	20.7	4.5	12.7	9.3*	3.5*
1981	54.2	29.1	41.9	32.6	21.9
Secondary (IX-XII)					
1951	8.7	1.5	5.3	0.1*	1.7
1981	34.2	14.0	22.0	+	+
Collegiate					
1951	0.75	0.10	0.4	+	+
1981	4.8	1.92	4.0	+	+

* Relates to 1967-68

+ Not available

The effort to increase the provisions of education, has helped in reducing rural urban differentials. For instance, while in 1951 enrolment in rural areas constituted 3% of the total enrolment at the collegiate stage, in 1977-78 this percentage had increased to 15%. Similarly, at the secondary stage the percentage of enrolment in rural areas to total enrolment increase from 28 to 51.

EXPENDITURE

7. Expenditure on education between 1951-84 has shown a fifty-fold increase, increasing from Rs. 114 crores in 1950-51 to more than Rs.6,000 crores in 1984-85. The overall annual rate of growth works out to 11.2% during this period. The table below summarises the position:

	Expenditure on Education (Rs. in crores)				
	1951	1961	1971	1981	1985 (Estimates)
Total	114	344	1118	3746	6000
Plan	20	90	115	520	800
Non-plan	94	254	1003	3226	5200

QUALITY OF EDUCATION

8. Apart from providing resources for expansion of the system, efforts were also made to improve the quality of education and enhance its relevance. During the period, 10+2+3 educational pattern was adopted which assisted in bringing about the much desired uniformity in education structure. Effort was made to upgrade curriculum and syllabi, particularly in mathematics and science so as to reflect the advancements that had taken place. In States, where these subjects were optional, mathematics and science were made compulsory for all children upto the matriculation stage. Socially useful productive work has been made a compulsory part of the school curriculum with a view to providing to school leavers skills which they can use in their communities. Although on a small scale, attempts were made to vocationalise secondary and higher secondary education with a view to meeting the requirement of middle level skills, in areas where shortages of personnel were experienced.

9. Large expansion of facilities for training of teachers was undertaken during this period. Consequently, the proportion of trained teachers working at different levels of education has increased substantially. At present, almost all teachers working in primary, middle and secondary schools are trained.

10. A number of institutions of excellence have been set up. These include among others, the Indian Institutes of Technology, Indian Institutes of Management, Regional Engineering Colleges, and Universities fully financed by the Centre. Because of the establishment of these and other institutions providing quality education, it has been possible to undertake tasks of scientific and technological development by utilising indigenously trained manpower rather than depend on skilled manpower imported from abroad as has been the case in many newly independent countries.

11. An extensive infrastructure has been built for undertaking research and development functions. Among others, institutions set up during the period included the National Council of Educational Research and Training, the State Council of Educational Research and Training etc. The experimental work done by these institutions has been of good quality and has provided experiences which can now be usefully utilised to undertake more massive programmes of quality improvement.

12. Efforts to utilise modern communications technology for educational purposes were initiated. The experience made available by Satellite Instructional Technology Experiment has come handy in developing modalities for utilising the national satellite. A beginning has also been made towards introduction of computer literacy courses in secondary schools.

13. In the area of language development substantial work was undertaken, which included among others, evolving of technical terminology in Indian languages, publication of quality books in Hindi, Sanskrit and Modern Indian Languages, training and appointment of language teachers with a view to facilitating the introduction of the three language formula. A number of institutions have been set up for undertaking research and training functions in different languages.

14. A large number of scholarship programmes for supporting further education of meritorious children without means were implemented. Among others these included National Scholarships for Meritorious Students, Scholarships for Talented Children from Rural Areas, National Talent Research Scholarships etc. The number of awards under these programmes has increased from year to year. The Government of India would be providing scholarships to over 70,000 meritorious students by the end of the Sixth Plan. These would be in addition to the scholarships and other financial concessions that are allowed to students by State Governments and educational institutions.

DEFICIENCIES

15. In spite of large expansion that has taken place and the substantial investments that have been made, deficiencies continue to prevail in the education system. The task of providing free compulsory and universal education to children upto the age of 14 has yet to be completed. It has not been possible, partly because of sparseness of population to establish primary school in all the habitations. In 1978, for instance, 1.91 lakhs habitation had no primary education facility within walking distance of one kilometer. Inter and Inter-state disparities in the availability of educational facilities continue to prevail, often intra-state disparities are much sharper than inter-state ones. The holding power of educational institutions continues to be low with the result that a large percentage of children drop out of the system without acquiring basic skills of literacy and numeracy. It has, for instance, been estimated that, of every 100 children entering Grade-I, 60 fail to complete 4-5 years of schooling. At public examinations 50% or more of the candidates fail to qualify. The low quality of education

reflected by dropouts children repeating grades and failures can largely be accounted for by the deficiencies of facilities and equipments from which educational institutions suffer. The Fourth All India Educational Survey, conducted by NCERT, indicated that a large proportion of primary schools are without buildings and do not have even the minimum basic teaching equipments, including black boards.

16. Education provided in schools and colleges continues to be general in character providing to school leavers few skills necessary for gainful employment. Without any meaningful programme of training students in skills, rush to colleges and universities, particularly for general education courses, continues to be unabated. College and university graduates are found to have no employable skills with the result that the ranks of educated unemployment continue to grow from year to year.

17. Strengthening of administrative machinery has not kept pace with the expansion of the educational system. Consequently, many of the institutions remain unsupervised and teachers receive little technical and academic guidance. Infrastructure at levels where help is needed to improve the quality of education has not come into existence. Of late, teacher absenteeism has grown considerably, partly because of the lack of adequate inspecting machinery. The deficiencies of education system are largely a consequence of inadequate investment. Bulk of the expenditure provided for education is incurred on the maintenance of the system, particularly on salaries of personnel. Consequently, very little amount is available in the system for implementing programmes which could improve the quality of education and help the system to adopt innovative ideas and practices. Outlays for education in proportion to total plan outlays have shown a decreasing trend as the following table illustrates:

(Rs. in Crores)		
Plan	Outlay for Education	Percentage of outlays for Education to total plan outlay
First Plan	170	7.2
Second Plan	277	5.8
Third Plan	560	7.5
Fourth Plan	822	5.2
Fifth Plan	1285	3.3
Sixth Plan	2524	2.6

Archievements in the Sixth Plan

18. In the Sixth Plan, the likely plan expenditure is of the order of Rs. 2930.32 crores (Rs. 705.16 crores in the Centre and Rs. 2225.16 crores in the State Sector), which is Rs. 406.58 crores in excess of the approved outlay of Rs. 2524 crores for education). The sector-wise progress of plan expenditure is given below:

(Rs. in crores)

	Sixth Plan (1980-85)	1980-81 (Actual)	1981-82 (Actual)	1982-83 (Actual)	1983-84 (Likely expd.)	1984-85 (outlay)
Elementary Education	905	103	115	153	230	278
Adult Education	128	15	19	26	47	59
Secondary Education	398	77	100	148	177)	383
University Education	486	66	80	87	134)	
Other Programmes	203	28	47	45	54)	
Total (Gen. Education)	2120	289	361	459	642	720
Technical Education	300	38	48	62	93	100
Art & Culture	104	13	19	22	31	33
Total	2524	340	428	543	766	853

It may be seen that except for elementary education where a shortfall is envisaged, plan expenditure in other sectors is likely to be in excess of the approved outlay. Analysis of plan expenditure indicates outlays provided for improving quality are not likely to be fully realised, more particularly in the university education.

19. The Sixth Plan for education provided inter-alia for mass education through universalisation of elementary education (formal and non-formal courses) and of adult education, practical bias in secondary education, vocationalisation of higher secondary stage and restructuring of under-graduate courses with a vocational bias. Forging of beneficial linkages between education, employment and development was stressed in higher education and technical education. The main achievements during the period are briefly discussed.

Elementary Education

20. A target of enrolling of additional 180 lakhs children in classes I-VIII was fixed for the Sixth Plan. According to the information made available by the states, this target is likely to be exceeded; it is estimated that 220 lakhs additional children are likely to be

enrolled between 1985-1990. An indicative target of 80 lakhs additional children to be covered under non-formal education was laid down. Since it could not take off in the first two years of the Plan, this target may not be fully realised. On the basis of the information made available by the States, it is estimated that a coverage of 30-40 lakhs children will be achieved under this programme. Thus the total additional coverage under the programme of universalisation of elementary education may be of the order of 250 lakhs making the total enrolment at the end of the Plan to be 11 crores.

21. Annexure I indicates state-wise enrolment levels likely to be reached by 1984-85. The States which are not likely to achieve the targets proposed for the Sixth Plan in respect of enrolment classes I-V (6 to 11 age-group) would be Bihar, Gujarat, Haryana, Karnataka, Orissa, Uttar Pradesh and West Bengal. Gujarat, Jammu & Kashmir, Karnataka, Meghalaya and Punjab are likely to fail short of the enrolment target for classes VI-VIII. States which are not likely to achieve enrolment targets in respect of girls for the age-group 6 to 11 would include Bihar, Gujarat, Jammu & Kashmir, Meghalaya, Orissa, West Bengal and Uttar Pradesh. In case of classes VI-VIII, Bihar, Gujarat, Haryana, Jammu & Kashmir, Meghalaya, Punjab, Uttar Pradesh and West Bengal will not reach the proposed levels for girls.

22. The population for the age-group 6-14 would be about 16 crores in 1990. In order, therefore, to complete the task of universal elementary education by 1990, 5 crores additional children would have to be enrolled in the Seventh Plan. In addition, provision for additional facilities will have to take into account under-age and over-age children who are availing of the facilities. Nearly 73% of the out-of-school children of the age-group 6 to 11 will be girls. Again, 80% of the remaining out-of-school children would be from the nine educationally backward States. There would, therefore, have to be a concentration of the effort on enrolling girls in respect of nine educationally backward States.

Adult Education

23. As in the case of elementary education adult education was included in the Sixth Plan as a part of the Minimum Needs Programme. The goal of reaching 100% literacy by 1990 was indicated in the new 20-Point Programme. The Plan stressed the need for making available diverse network of facilities and programmes for education, combining formal and non-formal modes of learning, so as to enable all citizens to acquire literacy, numeracy and functional skills of relevance in daily life and to local environment. While no physical targets were laid down, adult education programme was to be developed on a large scale and concentrate on the age-group 15-35. As many as 386 rural functional literacy projects, 380 voluntary agencies and 49 universities with 13,000 centres were associated with the adult education programme. According to the information available, this programme is likely to cover 20 million adult illiterates of the age-group 15-35 by 1984-85 out of the 110 million adult illiterates estimated for 1990.

Secondary Education

24. Provision has been made in the Sixth Plan, among others, for normal expansion of facilities in response to social demand for secondary education. The provision for facilities such as residential schools, scholarships, freeships etc has been included to make secondary education available in backward areas and for the weaker sections of the society. Vocationalisation of higher secondary stage is one of the important programmes included in the Sixth Plan partly for diverting a substantial proportion of children from general education to various vocational streams and partly as an interface between education and economic development. The programme has not yet been taken up in a big way in most of the States; only in the States of Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu and West Bengal the programme is being implemented on a reasonably satisfactory scale.

Higher Education

25. In higher education, the major thrusts of the Sixth Plan were on maximum utilisation of existing facilities, special emphasis on first-generation learners and socially dis-advantaged groups, forging linkages between education, employment and economic development through measures for restructuring of under-graduate courses with a view to making them employment and development oriented, greater involvement of students and teachers in community development activities and selective strengthening of infrastructural facilities for research and development. Major programmes of restructuring of under-graduate courses with vocational bias, promotion of post-graduate level research on structural problem of local and regional relevance as well as fundamental research, consolidation and maximum utilisation of existing infrastructural and replenishment of institutions with the bare minimum necessary physical facilities were implemented during the sixth plan period in this sector. The impact of these programmes has been too small to be recognised and much remains to be done in this regard. Only 55 colleges implemented the programme of restructuring of under-graduates courses and only 20 colleges could be made autonomous. Similarly, the programme of correspondence courses with only an enrolment of one lakh has not clicked. The inflexible functioning of the universities has been the main stumbling block in the implementation of innovative programmes.

Technical Education

26. In the Sixth Plan period, the major emphasis in this sector was on consolidation and optimum utilisation of existing resources and development schemes initiated in the earlier Plans. Efforts have been made in this sector to provide facilities in areas where deficiencies existed such as computer science, instrumentation, product development, maintenance engineering bio-science, and material science. Emphases has been laid on spreading a network of community

polytechnics, strengthening of infrastructure and physical facilities, including modernisation of equipment and introduction of courses in emerging technologies.

The Challenge Ahead

In conclusion, it may be stated that educational development in India since 1950 i.e. the commencement of planning has been phenomenal in absolute numbers. The contribution of education to national development and economic growth has been substantial. Yet there are several deficiencies to be overcome. The goals of universalisation of elementary education and eradication of illiteracy are yet to be achieved. Education has to be made more relevant to the needs of the people and impart a new dynamism to the economy. Observed dysfunctionalities have to be removed. There is need for renovation in several areas to ensure equity, efficiency, quality and a high level of productivity in Society. Education of the right kind has to take shape for India of the 21st century. This challenge has to be met in the context of overall constraints on resources, changing technologies and growing aspirations of the people. It is in this context that the proposals in the succeeding chapters have been drawn up.

CHAPTER II

THE APPROACH AND STRATEGIES IN THE SEVENTH FIVE YEAR PLAN

1. The Approach to the Seventh Five Year Plan "recognises that mere expansion of existing structures, models, methodologies and institutions will not best serve the country's needs and that educational reforms and renovation aimed at introducing and ~~reinforcing new patterns and designs of education that are flexible,~~ varying, relevant and linked to widely diverse local culture and social environments ~~will have to be~~ taken in hand. The emphasis should be on innovation, on low-cost alternatives and societal involvement, all aimed towards linking education effectively to the needs of the people to employment and to development. ~~The reforms~~ should aim at continuous improvement of standards at all levels and even more importantly at greater equity".
2. The Seventh Five Year Plan emphasises that one of its primary tasks must be the harnessing of the country's abundant human resources and improving their capabilities ~~for development with equity.~~ It recognises that programmes for alleviation of poverty, reduction of economic and social inequalities and improving productivity can and ~~should be integrated with educational development.~~ The strategies for educational programmes, training and their organisational design are expected to be such as to release the latent power of human resources. The Seventh Plan would particularly ~~focus upon women, youth and economically weaker groups so that they can make increasing contribution to the socio-economic development of the country.~~
3. An important aspect of human resource development is to match educational planning with manpower planning to avoid imbalances between supply and demand in regard to trained and educated manpower. All existing training programmes ~~would thus need to be~~ reoriented. The Approach Paper recognises that the skills of rural artisans require upgradation to improve their competitive capability. Policies to attract and develop requisite manpower for hill and tribal areas are also to be pursued with vigour.
4. There are several references in the Approach Paper to the need for raising the level of literacy to improve the functional relevance of education and to expand opportunities for acquiring new skills especially in the education for rural development and employment programmes. It is envisaged that dovetailing of development activities with educational programmes would improve productivity and render education more relevant in the process.
5. It is obvious that the objectives and approaches of the Seventh Five Year Plan call for several new strategies. Education being a long-term process, has to have a certain continuity. The basic policies and reforms of education have been considered in the past by several commissions and committees. The fact, however, remains ~~that~~ the interpretation and implementation of these policies has varied widely. Their adoption and effectiveness has been far less than desired. There is need for a fresh look at the implementation of the

educational policy and measures that have been advocated from time to time. We must arrive at a broad consensus among all the States and other agencies concerned with education so that in the Seventh Plan basic programmes are introduced in substance and in earnest spirit all over the country. The specific shortcomings in implementation of various educational policies and programmes will have to be overcome and experience gained over the Plan utilised for this purpose.

Some of the more important strategies to be adopted in the Seventh Five Year Plan towards the achievement of the above goals are:

(i) The cultural and value component of the existing educational programmes will be reoriented to overcome the alienation of the educated from the cultural traditions of the country to promote national integration and to strengthen the allegiance to the Constitution of India, its Fundamental Rights and Duties.

(ii) Determined efforts will be made to achieve effectively the goals of universal elementary education and eradication of illiteracy. Detailed block and school level planning with community participation and effective linkages with the local environment and developmental activities is envisaged as a major strategy to overcome the several obstacles associated with achieving the goal of universal elementary education and eradication of illiteracy. The inadequacies of existing delivery mechanisms at the grassroot level have to be overcome for the achievement of the above stated goals. It is the considered view of the Steering Group that in order to overcome these inadequacies the local community has to be involved through village development committees consisting of community leaders, particularly from the target groups. Such involvement will be for purposes of identifying problems, assessing available inputs, implementation of programmes and continuous monitoring and evaluation. Community participation will thus mean not only support for official programmes but also active involvement in planning and implementation processes. It will also result in emergence of holistic multisectoral development approaches having direct bearing on survival of the poor and the deprived. The aim will be to improve the quality of life of the target groups. Administrative deficiencies like non-responsiveness to the public needs, absence of coordination etc. can be overcome as these committees can act as pressure groups. It is through these committees that education can be effectively linked to the needs of the people and to developmental programmes. In due course, this process should lead to administration playing essentially the role of facilitator and thus promoting the culture of self-reliance among the people. Mechanisms and structures for plan formulation at block and district levels will need to be modified to support and encourage the community participation approach to the delivery system, along the lines suggested above. Such participation along with detailed school level planning for each catchment area will result in block and district level plans that would have clear and specific targets. Such an approach would be helpful in achieving meaningful literacy and universal primary education including the means and strategies for achieving the same, and would identify inputs and institutional support systems that are required.

(iii) The preparation of block and district level plans and their meaningful and effective implementation with community participation will call for strengthening and reorientation of existing support systems, mainly through:

- arrangements for research, experimentation and demonstration
- inservice and pre-service training
- production of teaching learning materials
- supply of needed inputs and facilities
- use of mass media and audio-visual technologies
- academic and administrative supervision and guidance
- monitoring and evaluation

Such support systems need to be developed for all levels of education. Every state would be expected to make a thorough review of existing arrangements and build up needed infrastructure and facilities, without which the various programmes envisaged in the Seventh Plan cannot be effectively implemented.

(iv) Well planned programmes would be initiated to remove shortcomings in existing educational institutions, so that essential needed facilities are provided and disparities are reduced to the extent possible. In particular NREP and other plan funds would be utilised, along with community contributions to remove the shortages and inadequacies in buildings, laboratories, workshops and play grounds as well as in equipment. Special arrangements for supply of inputs would be made wherever necessary (such as textbooks, science kits, paper etc.)

(v) An important focus of the Seventh Five Year Plan would be to raise the quality and relevance of education. In particular efforts would be made to raise the standards of science and mathematics teaching at all levels. Some important strategies to be adopted in this regard are given in Annex 1. The emphasis would be on attainment and achievement in terms of learning and not mere enrolment or attendance. In other words opening of schools, posting of teachers, and enrolment of students should not be the end of the educational endeavour, but the beginning of the educational programme. Learning attainments should be adequately evaluated to help in remedial action, wherever possible.

(vi) Non-formal Education and open learning systems would be encouraged at all levels. These programmes are envisaged for providing a net work of learning opportunities to those who cannot or do not avail of the formal system's facilities for one reason or the other. They would also provide opportunities for recurrent and life long education and constitute a major means of promoting greater equity. Special attention will be paid to the quality of services provided by non-formal and open learning systems.

(vii) Education of Scheduled Castes and Tribes and those in hill areas will be specially promoted. Some specific recommendations in this regard are given in Annex 2. It may be noted that other Working Groups set up by the Planning Commission have also made recommendations in this regard.

Women's education, which is an area of special importance, will be similarly promoted and recommendations for the same are given in Annex 3.

(viii) Equal attention will be paid to identification of talented children, and provision of special facilities for the gifted as well as for organisation of special programmes to overcome learning difficulties experienced by specific groups, especially the poor and the backward.

(ix) Within the overall constraint of resources, incentive programmes, including provision of mid-day meals, will be expanded. Such incentives and assistance will go a long way in reduction of existing educational inequalities.

(x) In the secondary and higher education sectors special efforts would be made, for consolidation and improvement of standards and introduction of related pedagogical reforms. The linkage of education system with the world of work and the world of research will be ensured through institutional mechanisms. Research within the university system will be strengthened and pursuit of excellence fostered as a matter of high priority.

(xi) Educational planning and manpower planning will be coordinated. Vocational education will be specially promoted so that education increasingly provides the skilled personnel needed by the economy and imparts a new dynamism to its growth by raising productivity. Every effort would be made to match, wherever possible, the content and methods of education, as well as the numbers educated to the manpower needs of the economy. Educational curriculum at every level will be made more relevant to the needs of the students as well to those of the prospective employers. Networks of information systems will provide necessary feed back to educational authorities to ensure that mismatch in numbers, quality or relevance as between supply and demand for manpower is minimised. The resources of the industrial and commercial establishments and developmental institutions will be fully involved and utilized in providing vocational education to ensure relevance and quality.

(xii) Necessary reforms will be initiated to make vocational education more attractive and prestigious. Degrees will not be insisted upon as an essential qualification or precondition for jobs, where it has no specific relevance. The emphasis on relevant and meaningful curriculum and on standards at all stages will itself induce employing agencies not to consider the degree as a necessary qualification. Government as the largest employer in the country should take a lead in this regard and they as well as other leading employers should reorient their recruitment policies, so that possession of relevant vocational skills/education rather than a degree becomes the pre-condition for employment. Libraries, museums, science centres etc. will be developed to foster a truly learning society and improve access to relevant knowledge. Modern media would also be utilised for this purpose.

(xiii) Student and non-student will be actively involved in mass campaigns for literacy and other developmental programmes. Their participation in Sports and Games would be encouraged and necessary facilities will be developed for this purpose.

(xiv) Education, although now a concurrent subject, is at present essentially within the sphere and competence of State Governments. also plan investments or new additional outlays on education are only a small part of the total outlay on education and the capacity of 'plan' to influence or modify the total system is to that extent, rather limited. What is needed therefore is to look at the strategies from Plan and Non-Plan together, not only from a financial point of view of zero based budgeting, but with a view to arrive at a basic consensus and understanding among all the States and the Centre and all the agencies involved as to the substance of what is sought to be achieved and as to the means of achieving it in the next five years. It is recommended that the first year of the Plan should be devoted to achieving this consensus and arriving at a broad blue print of action that should help in the implementation of education programmes in the Seventh Five Year Plan.

(xv) Education is also subject to tremendous social pressures for expansion not necessarily in the right direction. These, if unregulated, lead to perversion of priorities and objectives and diversion of resources from vital sectors. On the one hand planning has to take into account the social demand for education and on the other hand it has to channelise and orient such demand in desired directions. Thus while the plan priorities may be in primary and adult education or in consolidation and quality improvement in other sectors, the pressures may be towards quantitative expansion of secondary and higher education. Even within elementary education, the pressures are often towards proliferation of schools and appointment of teachers rather than in the direction of improving quality and relevance, reducing drop outs, providing inputs etc. In a country with vast educated unemployed such pressures are understandable, but the pressures coupled with the failure to regulate numbers in teacher training institutions could result in large numbers of small, non-viable schools and ineffective dispersal of funds. One of the priority areas wherein the consensus referred to in the previous para should be arrived at is in regard to enforcing "hard norms" in regard to quantitative expansion, whether in establishment of new institutions or expanding existing ones or creating new posts of teachers. Without effective restraint on quantitative expansion, it may be difficult to re-orient the education system in and desired direction.

(xvi) Another aspect relates to adoption of low cost measures. There is the obvious need and tremendous scope for reduction of unit costs at all levels of education by use of part time personnel who are available and whose use is also very often justified by academic considerations. There may also be much scope for economy in construction of buildings where new designs and local material can bring down the costs substantially. There are other opportunities for bringing down costs by links with industry or other developmental agencies and research institutions and by optimal use of existing resources, within institutions and in the community. There are also

opportunities for mobilisation of resources. It is in view of these potentials and the emphasis on productivity in the Seventh Plan, that a separate working group on Resources for Education was constituted (See Chapter Resources). Yet the several suggestions made in this regard would remain on paper, as they have tended to be in the past, unless there is a consensus on the measures to be taken and the cooperation of the teaching community is secured. There is no reason to believe that the teaching community, which is as committed to educational advancement as anyone else, would be opposed to utilisation of part time teachers and other measures, which contribute to educational progress, what is needed here is a plan of action and monitoring system, similar to monitoring of expenditures.

(xvii) To begin with it is of fundamental importance to have a review of on-going expenditures. The Central Advisory Board of Education had in the past called on the States to make a thorough and periodic review of teacher deployment. While there are understandable human problems in teacher postings and transfers which must be kept in view, it is necessary to insist, as a prior condition, that existing teachers should be properly deployed before funds are allocated for creation of new posts of teachers.

(xviii) Another goal of the Seventh Plan would be to minimize the wastage of resources in education arising out of dropouts and stagnation. If third class passers are also considered as nearly sub-standard output, the existing level of productivity of the educational system is extremely low and needs to be improved (even when we do not take account of the relevance of the output). Steady improvement in the performance of students should be thus among the major objectives of the Seventh Plan.

(xix) All the above mentioned aspects of educational policy and goals assume a certain level of efficiency in educational systems. Seventh Plan seeks to achieve and maintain high levels of performance so that efficacy of education in promotion of development and social regeneration can be sustained. More specifically educational efficiency is sought to (a) improve the quality of education, (b) decrease costs by organisational innovations, and eliminating wastages, (c) make education more responsive and accomodating to the technological changes.

(xx) In addition to the efforts aimed at optimal utilization of educational resources, a substantial increase in budgetary allocations and plan outlays is inevitable if the plan objectives are to be achieved. Education has suffered far too long from gross inadequacy of funds and backlogs have accumulated to the point of undermining the morale and motivational climate of the system. The allocations proposed in this report represent a modest and conservative estimate, although it does represent a substantial step up from the extremely low allocations of earlier plans. Considering the high rates of private and social rates of return to education, and the crucial role of "human capital" in the modernisation, growth, social justice and self reliance - apart from the fact that in itself education is of utmost value - it is hoped that requisite allocation of funds would be made in the Seventh Five Year Plan.

A NOTE ON IMPROVEMENT OF SCIENCE EDUCATION

Science Education is a complex structure of many related disciplines, and it has a symbiotic relationship with mathematics. A good foundation in mathematics is essential for advance level science education. The development of Science Education including mathematics depends on the imagination of science educators and their desire to understand the means through which the education could be imparted to students so that the students could use the educational experience in day to day life situation.

Science education starts from the primary level of education and since many of our children do not continue their education after the primary level, the scientific temper developed at this stage among the pupils is an important factor for these persons.

Much of our science education as practiced in the class room during the present day are thrust upon the students in the most unscientific way-certain scientific concepts are imposed upon the students without giving them an opportunity to examine the validity and reliability of such concepts and this amounts to rote learning.

Effective science education warrants that the methodology of education should be through a process of participatory training whereas we rely upon one method i.e. the chalk and talk method. The major constraints are (a) lack of right kind of attitude among the teachers and paucity of funds to provide laboratory facilities to the educational organisations. ~~The former is perhaps more important factor than the later.~~

With the rapid advancement of science & technology science education to a certain level should not be confined to a limited group but should be for all the students. The factors which have critically effected science/mathematics education are social, political and economic temper of the times.

To upgrade the quality of science education in the country starting from the primary education level to the universities through high schools the following measures are crucial:

1. It is essential to revise the Science curriculum keeping in view that science education is for all instead of science for the academic elite. It may be emphasised in this context that the curriculum for the first generation of learners has to be different from that for the students whose parents are highly educated.
2. Science educators at the various educational institutions i.e. primary, secondary as well as tertiary should be appointed only

after a rigid test to assess their aptitude for imparting the right kind of skill and such teachers should be well trained and there should be a provision for refresher courses at intervals of 3-4 years. Kothari Committee's recommendations regarding primary schools-education, high school teachers interaction, though recommended since last two decades which was mainly meant to upgrade the knowledge of the teachers is yet to be implemented.

3. Less emphasis should be given on class room teaching. Students should be encouraged to participate in science teaching and the process of education should be a participatory one. Most of the primary schools and a number of high schools in the country have either no science equipment or have very poor laboratory facilities. As a result of this the scientific concepts are impressed upon the students without giving them a chance to derive such concepts through observations and experiments. Immediate steps should be taken to modernise the laboratories and the buildings.
4. In most of the educational institutions the only teaching aids are the black boards and the chalk and with the present development in science and technology, more emphasis should be given to use modern teaching aids.
5. The examination system should be completely revamped so as to assess how much a student has understood his subject rather than trying to know how much he has memorised which is the present practice of assessing a student.
6. Teachers with right kind of attitude should be given incentive and there should be clear provision for punishment for negligent teachers who do not use the facilities which are available for science teaching.
7. An efficient system of monitoring of the programme is to be developed so as to assess the impact of the programme and to make mid course corrections if necessary.

EDUCATIONAL DEVELOPMENT OF SCHEDULED CASTES, SCHEDULED TRIBES AND MINORITIES

SCHEDULED CASTES AND SCHEDULED TRIBES

The Scheduled Castes and Scheduled Tribes population together account for 23.6 per cent of the total population of India. They form the lowest rung of the social and economic ladder. The Scheduled Castes and Tribes have been the object of social apathy and discrimination for centuries. 75 per cent of the total Scheduled Castes population of the country is concentrated in 8 States, namely, Andhra Pradesh, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, West Bengal, Tamil Nadu and Karnataka of which 6 States excluding Karnataka and Tamil Nadu have been identified as educationally backward States. The Scheduled Tribes on the other hand have by and large remained isolated from the mainstream and unaffected by the winds of change and development. Educationally, the Scheduled Castes and the Scheduled Tribes form the most backward group of our country.

The percentage of literacy in respect of Scheduled Castes and Scheduled Tribes has registered a proportionately higher rate of growth than the general population in the decennium 1971-81. In respect of Scheduled Castes it has increased from 14.7 to 21.38; in respect of Scheduled Tribes from 11.3 to 16.35, but still there exists a wide gap between the educational attainments of SC, ST and the rest. Therefore, educational development of both the Scheduled Castes and Scheduled Tribes would call for very high priority during the Seventh Plan, if the objective is to eliminate the imbalance and disparities prevailing among these weaker sections of the community and the general population.

Over-riding priority has been attached in the Seventh Plan to universalisation of elementary education in respect of children in the age-group 6-14 and removal of adult illiteracy in the age-group 15-35; both these objectives have to be achieved by the year 1990. Of the 60 million additional children to be enrolled during the Seventh Plan, a proportionately larger number of unenrolled children would belong to Scheduled Castes and Scheduled Tribes. In spite of the fact that primary and middle schools have been opened within easy walking distance, children belonging to these deprived groups have not been able to take advantage of the educational facilities. The emphasis should be on enrolment of Scheduled Castes, Scheduled Tribes children, if necessary by opening both primary and middle schools within easy walking distance in Harijan bastis and tribal areas. Adequate incentives should be provided to children from these groups to attract them to schools by providing free textbooks, stationery, uniform, mid-day meals and scholarships. In respect of children who cannot attend schools regularly, opportunities for non-formal education should be provided on an intensive scale in Harijan bastis and in tribal villages.

Among the Scheduled Castes and Scheduled Tribes a high percentage of girls and women are educationally backward. To give a boost to girls education among Scheduled Castes and Scheduled Tribes, provision of opportunities under the Centrally Sponsored Scheme for appointment of women teachers on 80:20 sharing basis, opening of non-formal centres exclusively for girls on 90:10 sharing basis, opening of early childhood centres in Harijan bastis and tribal villages should be further intensified.

The State Governments have been instructed to ensure that at least 30 per cent of the beneficiaries enrolled at the adult education centres should be from among Scheduled Castes and at least 15 per cent should be from among Scheduled Tribes. Emphasis should be attached to ensuring increased enrolment of Scheduled Castes and Scheduled Tribes under the Rural Functional Literacy Project, State Adult Education Programme, Post-Literacy and Follow-up Programmes, Shramik Vidyapeeths and Assistance to Voluntary Organisation. Priority should be given to opening of adult education centres specially for these sections wherever necessary and intensify the post-literacy follow-up. Skill development programmes leading to greater employability and/or income generation should also form part of adult education programmes meant for weaker sections.

Provision of scholarships both at the pre-matric and post-matric levels to Scheduled Castes and Scheduled Tribes, no doubt, is an important instrument of equity in education and has contributed to equalisation of education opportunities for these deprived sections. In order to ensure, however, that a larger number of students from SC, ST qualify themselves for admissions into engineering and medical colleges after the higher secondary stage and also in services at all-India level, it would be necessary to pay attention to the improvement of levels of performance in schools and colleges.

Considering the low educational attainment levels particularly in technical institutions and wastage rates in medical and engineering colleges which is sometimes as high as 50 per cent or more, the need for remedial education should receive higher emphasis. It is, therefore, necessary that apart from monetary incentives like provision of scholarships and residential hostel facilities, remedial teaching at various levels to enable the SC/ST students to get over the initial handicaps faced by them and improve their levels of performance. The scheme of coaching of students for various professional and technical courses and for higher level competitive examinations for employment should similarly call for priority.

Some of the initial difficulties of first-generation school goers from Scheduled Castes and Scheduled Tribes arise out of language of instruction at school which may be different from the language/dialect spoken at home. Attention should be given to preparation of primers in the mother tongue particularly in tribal languages. The Central Institute of Indian Languages has taken 52 tribal languages for linguistic description and material production which include preparation of grammar, dictionaries, school primers, adult literacy primers and collecting folklore besides imparting in-service training

to instructors and teachers in tribal languages. The Institute has developed a model of bi-lingual education for use of tribal and/other minority languages as medium of instruction at primary level. It may be mentioned that development of Saora primers in Oriya script for tribal children in the Saora tracts of Orissa and Gonda primers in Telegu Script in Andhra Pradesh are important educational innovations and such initiatives may go a long way in ensuring universalisation of elementary education for tribal children.

The needs of children living in remote or isolated pockets as is the case with many of the primitive tribes or in urban slums where provision of educational facilities is rather poor, should call for emphasis, both in respect of development of infrastructure, where existing, and provision of educational facilities, where such facilities are not available.

EDUCATIONALLY BACKWARD MINORITIES

The benefits of the various programmes taken up by the Government in the field of education have not reached some of the educationally backward minorities in adequate measure. Special efforts should be made to bring them at par with the rest of the society.

Separate data on literacy and educational level in case of the minorities is not available. However, surveys and field studies on some of the educationally backward minorities clearly indicate that their participation in the educational system is on a very limited scale and drop out rates are much higher than the national average. It has also been seen that the participation rates decrease with higher level of education. The educational backwardness of minorities need to be remedied through appropriate strategies which should lay emphasis on the following:

- (i) An area approach i.e. identifying districts having large concentration of educationally backward minorities and providing these areas with adequate educational infrastructure in the form of opening of schools, polytechnics, ITIs, etc.
- (ii) Provision of special coaching and remedial teaching for students belonging to these sections at various levels of education and for competitive examinations.

EDUCATION FOR GIRLS AND WOMEN IN THE SEVENTH FIVE YEAR PLAN

Education and training both formal and non-formal are among the most important determinants of the effective mobilization of women in developmental process. Girls and Women who are not equipped by their education to shoulder economic responsibilities may remain dependent and powerless all their lives. It is therefore necessary to identify ways and means to improve educational opportunities for women in order to develop their great potentiality and thus to prepare them to emerge into a powerful force for change in the society.

Development programmes for women must recognise the multiple handicaps and disadvantages from which they suffer. In order to promote equality of opportunity and treatment for girls and women it is necessary that they should be actively involved in the developmental process. It is necessary that all development programmes implemented by public or private sector must identify programmes for employment for women. The main emphasis should be on increasing opportunities for wage or self-employment for women. Education and training in this perspective is one of the fundamental elements for the advancement of women, for their self-reliance and the enhancement of their status within the family and society.

Although 92% of all children in the age group 6-14 have access to primary school within a distance of one kilometre, it has not been possible to achieve even 90 per cent enrolment in respect of children in this age group in the schools. The rate of drop outs in respect of girls in the primary stage is 74 per cent. To achieve the goal of universalization of primary education by 1990 the formal system of education will require not only linear expansion but qualitative changes. Similarly out of 110 million adult illiterates in the age group 15-35, nearly 68 million are women. To bring this large number of illiterate women into the fold of literacy within a period of five years, strategic commitment of the national and the State Governments and creation of a mass awareness about educating women is necessary. While implementing the educational programmes for girls and women the following shortcomings have been experienced.

- (i) Socio-cultural attitudes and economic constraints are major barrier to educational participation of girls and women.
- (ii) The cost of education is a financial burden in low income families and scarce resources are invested in the education of boys.
- (iii) Due to a poverty majority of girls are either engaged in economic activities or give a helping hand at home in bringing up the younger siblings. Thus they do not find time to attend regular formal schools nor is the curriculum relevant to their needs.

- (iv) Paucity of trained women teachers and adult education instructors for women in the rural areas.

In order to achieve the national objective of universalisation of elementary education and eradication of illiteracy by 1990, it would be necessary to take decisions on the following for implementation in the Seventh Five Year Plan:

1. The adoption of a comprehensive National Policy with a strategic commitment to promote equal educational opportunities for girls and women. The national policy should set goals, earmark necessary resources and outline strategies.
2. District level plans should be prepared with detailed information about village-wise number of illiterate girls and women to be covered under the different educational programmes. The district level plans should also attain information about the literacy requirements of the learners, identification of the agencies which can take up these programmes, requirement of women teachers curriculum development etc.
3. A Special Cell should be created at the National and State level to monitor the progress of the implementation of girls enrolment in formal and non-formal system and women's literacy programme in the adult education centres.
4. As social traditions and poverty are major impediments in the education of girls and women the curriculum should be so designed to provide to the learners skills which can prepare them for all aspects of life including work leisure and family life. In this connection, the innovative experiences of Earn While You Learn Scheme which is being implemented in Madhya Pradesh and Foster Parent Scheme of Maharashtra may be adopted on a wider scale in the rest of the country also.
5. As trained women teachers are scarce, a special Centrally Sponsored Scheme, assisting the States/Union Territories in the training of women teachers in the Seventh Five Year Plan should be implemented. The teachers should be equipped with necessary competencies in promoting self-esteem, skills and need-based educational inputs in girls education.
6. Non-formal Education which has flexibility of time and is need-based should be developed as a major educational system for girls in all the 193 districts where the literacy rate of women is below the national average.
7. Integrated Rural Development Schemes, National Youth Employment Programme, Development of Women and Children in Rural Areas, TRYSEM and other development schemes of the Ministry of Social Welfare like ICDS and programmes of Health Ministry must have a component of literacy for their women beneficiaries. For this the development departments should keep two per cent of their budget for imparting literacy to women.

8. All women working in industry or employed elsewhere should be made literate by the employers by giving one hour out of working hours for educational purposes. Necessary legislation to this effect should be enacted in consultation with the Labour Ministry.
9. Identification of local resources, institutions and elderly women of the community who can mobilize people for creating a learning environment. If necessary orientation may be given to such women leaders for which a provision will have to be made in the national programmes.
10. To provide grants-in-aid to voluntary organisations for running non-formal centres for girls and for women and also for providing training to women instructors.
11. Strengthening of the Women's Wing in the NCERT for curriculum development suitable to the needs of girls. Similarly for adult women identification of voluntary organisations which can provide the resource support and setting up of the resource units for women in the States and Districts.
12. For undertaking these activities for girls and women National and State level Plan schemes should be prepared for which non-divertible funds should be ear-marked.

In view of the magnitude of the Women's illiteracy and consequent backwardness a comprehensive National Policy which contains a strategic commitment to provide equal educational opportunities for development of girls and women within a definite time frame is necessary. This commitment is urgently needed to transform rhetoric into reality.

CHAPTER III

ELEMENTARY EDUCATION

Studies across the world, especially in developing countries, have shown that investment in elementary education results in high rates of return both social and private. It is well-known that universal elementary education contributes substantially to social and economic progress and to population control. Further, universal elementary education being our constitutional commitment, realization of this objective cannot be delayed any further, without a grave cost to the nation. There are serious obstacles to be overcome ensuring the active participation of learners from the poorer and backward sections of society. The Seventh Plan must make determined effort to overcome such obstacles and do all that is necessary to ensure Universalization of Elementary Education (UEE) by the year 1990.

2. Despite the substantial progress made so far the magnitude of the problem still remains immense. At the end of the Sixth Plan 1120 lakhs children are expected to be enrolled in schools in class I to VIII, another 40 lakhs in non-formal educational centres (for Statewise and other details see Statements I and II). This constituted 76 per cent of the school going children in the age group 6-14 in the year 1984-85.

3. In the year 1990 the number of children in the age group 6-14 is estimated to be 16.3 crores. Facilities have to be provided not only to this age group, but also for underage and overage children estimated at 10 per cent of the total population in the age-group 6-14.

4. Not all the additional enrolment would be in the school system. The average additional enrolment in schools has tended to remain around 50 lakhs a year despite intensive enrolment drives. Also as one moves towards universalisation, additional enrolment in formal schools will become increasingly difficult, as the children to be enrolled will increasingly be from poorer sections of the community, scheduled castes, scheduled tribes and the bulk of them will be girls. Any strategy for universalisation of elementary education must take note of the reality that a large number of children cannot or will not attend full time formal schools for reasons that have been classified as social, economic and pedagogical. Further many children, even if enrolled are likely to drop out. Although strenuous efforts will have to be made to bring down dropout rates, if not to be completely eliminated. Hence, if the strategy of universalisation is based only on formal full time schools, it is unlikely that the goal would be achieved in the Seventh Plan. A two fold strategy is therefore, required. Each State has to make a realistic estimate of the number of children likely to be enrolled on a full time basis and provide adequate facilities for such children. Simultaneously they have to organise alternate systems of providing education to reach those children who are not likely to attend formal schools, including those who drop out from formal schools before completing elementary education. Statements III to V indicate on an approximate basis the

number of children that could be enrolled in formal full time schools during 1985-1990 and the number of children that have to be covered through non-formal education centres in various States. These figures are in the nature of indicative estimates aggregated at the State level. More specific targets have to be worked out for formal as well as non-formal education, block-wise and village-wise through decentralised planning techniques by the states and union territories. Once such targets are worked out at the decentralised level for the next five years, it would be expected that the authorities responsible for the achievement of the target would take all necessary steps and adopt all needed strategies for the meaningful achievement of these targets.

5. In developing those block level plans the detailed plan of action should be worked out in the light of past experience and in the light of new approaches suggested in the Seventh Plan.

6. Approach to universalisation of elementary education during the Seventh Five Year Plan includes intensified use of existing facilities, provision of economically viable and educationally relevant new facilities, promotion of non-formal system of learning, promotion of appropriate incentives development of curriculum related to local socio-economic factors and environment needs and a preparatory programme of early childhood education, particularly for children of first generation learner's families.

7. Following this approach a centrally sponsored scheme of non-formal education on an equal sharing basis was drawn up and implemented in the nine States, which were classified as educationally backward, on the basis of low enrolment. Encouragement was given to voluntary efforts not only for running non-formal education centres in these States, but also for innovation and experimentation throughout the country. States and Union Territories were assisted in a big way by supplying paper required for printing reading-learning materials required for non-formal education programme. To increase the enrolment of girls, which is lagging far behind that of boys and which has been emphasised in the 20-point Programme of the Government announced in January 1982, Central financial assistance for opening non-formal education centres in the nine States was raised to 90% in 1983-84.

8. In the formal sector a scheme was drawn up and implemented under which Central financial assistance was provided to the extent of 80% for appointment of a specified number of women teachers in primary schools in the nine States. To give a further boost to the programme of universalisation of elementary education and to accord recognition for excellence in performance for the spread of girls education both in formal schools and in non-formal centres, a scheme of awards/incentives was drawn up and implemented. Under this scheme, awards were given to the different administrative levels viz. Panchayats, Blocks/Tribal Development Blocks, Districts and States/Union Territories. For the spread of early childhood education a scheme of assistance to voluntary organisations in the nine educationally backwards/States for running early childhood education centres was formulated and implemented.

Tasks in the Seventh Five Year Plan

9. The magnitude of the task in the Seventh Plan would call for a new design of education to which reference has been made in the Chapter on approach and strategies, which should give the highest emphasis to provision of opportunities for part time or own-time education under non-formal education programmes to achieve the goal of universalisation of elementary education by 1990 in addition to a vigorous drive to ensure enrolment in school. The effort at the block level will have to be multi-faceted for intensifying some of the strategies adopted in earlier plans and at the same time developing new strategies to reach the groups which have not hitherto benefitted from the educational system. Some elements of the new design at the block level are indicated below:

- (i) The programme has to be planned in relation to the needs of specific areas or community particularly those who have remained outside the reach of elementary education. Intensive efforts should be made to provide for educationally backward.
- (ii) Girls in large numbers continue to remain outside the main stream of education. Proven efforts of the past should be intensified to enrol girls in elementary education - both in formal and non-formal channels. Effective steps should be taken to overcome the socio-economic barriers hindering the progress of girls education. It has to be remembered that spread of education among girls is the key to the success of the programme of universalisation of elementary education.
- (iii) Spread of education among the children belonging to the Scheduled Castes/Scheduled Tribes, other weaker sections of the society including landless poor, agricultural labourers and urban slum dwellers needs to be accelerated and suitable programmes of formal and non-formal education should be developed for these target groups.
- (iv) Greater impetus has to be given to early childhood education by undertaking programmes with initiatives.
- (v) Schemes of Central assistance for the spread of education amongst the target groups should encompass not only educationally backward States but even educationally backward regions and districts in other States.
- (vi) Children employed in semi-organised sector constitute a major segment of non-enrolled children. Rough estimates indicate 1.3 crore children are unable to take advantage of schooling because they work for wage employment. Their needs have to be met preferably in places of their employment. All establishments employing child labour should be under an obligation to provide for education to all such children of school going age.

- (vii) Further extension of formal schooling would be necessary in unserved habitations especially for middle school education. In areas where there is already a primary/middle school within easy walking distance, the available facilities be strengthened by improving building, furniture, equipment, library, drinking water and toilet facility (especially for girls) rather than opening new schools.
- (viii) In sparsely populated habitations there is no alternative but to open new single teacher schools. Teachers in such schools should be oriented adequately. It would be advantageous to think in terms of appointment of teachers on part time basis and mobilisation of community's educated workers and educated volunteers.

It may be necessary to have all alternative arrangements of formal type such as grouping of schools, creation of central and residential schools, arrangements for transportation of children etc.

- (ix) Systematic evaluation of incentives provided for enrolment and attendance of children should be made to ensure that the incentives are effective in relation to objectives. It would be worthwhile to think in terms of new and effective incentives which should be judged only in terms of their impact.
- (x) A comprehensive health scheme designed in collaboration with health authorities who are basically concerned with primary health care, should be introduced in primary schools, especially in rural areas. This will not only serve as an effective incentive for enrolment and attendance but will also enhance the health status of the children. This will be an effective complement to the Mid-Day Meals Scheme.
- (xi) Open Learning System and Non-formal Education are further discussed in para 32. The principle of the opening of non-formal education should be implemented effectively in order to make education relevant, effective and useful. Community involvement and use of radio and television in support of primary education should also be encouraged.
- (xii) Special emphasis should be laid on quality of education, care being taken to remove deficiencies in elementary schools.

Wider Diffusion of Innovative Approaches in Education

10. Work has been done by NCERT as well as SCERTs/SIEs and other institutions in developing innovative approaches that would help to universalise elementary education and enhance its quality and relevance. The various projects being assisted by the UNICEF and those undertaken by governmental and non-governmental agencies have

provided sufficient experience which can now be usefully utilised in the early realisation of the goal of universal elementary education. These innovations need now to become a part of the system.

Among others the following steps would be necessary to ensure that innovations become part of the total system:

(a) Dissemination of information about innovative ideas and experiences has to be undertaken. Information must be provided to all those concerned with universal elementary education, planners and administrators, supervisory personnel, teachers and communities.

(b) The capability of counterpart institutions to adopt innovations to local situations needs to be substantially strengthened. In spite of their having been in existence for some years, most of the State Councils of Educational Research and Training and State Institutes of Education continue to be understaffed and with meagre resources and indifferently attended/staffed, making it difficult for them to undertake meaningful research, development and extension work. Teacher training institutions which have and can develop closer links with schools also do not have enough resources to undertake any worthwhile extension work.

(c) There must be a large programme for training of functionaries who are expected to utilise the experience from innovations. Training of these personnel must include an understanding of the innovation, participation in the implementation and assistance to incorporate the experience on a systematic basis.

(d) The implementation of new approaches will depend to a great extent on decision makers, particularly the administrators who play a key role in identifying and providing for different programmes. It is, therefore, necessary to make systematic effort to make decision makers aware of the innovative ideas and practices, as to how they can be incorporated in the system and the resources - manpower and materials required for the purpose.

(e) There is urgent need to coordinate the work done under experimental projects with on-going activities of the State Departments of Education and State level institutions. For instance, while substantial work has been done by SCERTs/SIEs in decentralised formulation of curriculum and the development of textual materials in relation to specific community needs, the on going exercise of revising syllabi and preparation of textbooks does not seem to incorporate the experience gained from these projects. Without such coordination, the two exercises seem to be going on parallel lines rather than converging into one major programme of syllabus revision and development of textual materials.

(f) The adoption of innovative projects requires funds. Most of the plans of elementary education have been concerned primarily with the establishment of facilities with very meagre resources being available for research and development work. In the Seventh Plan, it would be desirable to earmark funds for implementing on a system basis some of the new approaches which have been demonstrated to be useful.

VALUE ORIENTATION AND QUALITY IMPROVEMENT

(i) Teacher Training

12. One of the weakest aspects of elementary education has been teacher training, particularly inservice training. There are teacher training institutions under the State Governments which are responsible for the training of primary school teachers after their matriculation. The curriculum of the training institutions is, by and large, out of date. In order to meet the contemporary needs of elementary education, it is necessary to reform teacher training. It is the primary school teacher, who is expected to improve the quality of primary education, bring in, environmental and health education, national integration and other values. The teacher is expected to motivate the children as well as their parents for enrolment and retention in schools. All these, a teacher can hardly be expected to do, unless his/her competence is of a higher order. The primary concern in the training of teacher should not remain limited only to pedagogy but a teacher should be exposed to mass media, science education and technology traits which he has to pass on. Hence, the Steering Group strongly recommends that a concerted attempt be made during the Seventh Plan to upgrade the thousand and odd elementary teacher training institutions, and that the preservice programme of teacher training be improved forthwith. Additional inputs may be necessary in order to modernise these institutions, increase the library facilities, introduce educational technology etc. Wherever possible, linkages with secondary level training institutions, colleges and other institutions should be established in order to break their isolation.

13. While pre-service teacher training at the elementary stage needs to be improved, it is necessary to emphasise the point that 29 lakh teachers are already working in the system, and that they need to be exposed to training. They have to deliver the goods immediately, if U.E.E. is to be achieved. Their motivation has to be aroused; they have to be given the know how of child-centered and environment-centered education.

14. Inservice training of such a massive number of elementary teachers presents a real challenge in the Seventh Plan. But this challenge has to be met. Considering the importance of national integration and of a core of values that we cherish, the earlier the children are exposed to education in values, the better it is, because the foundations of character are laid very early in life, even earlier than the age at which elementary education begins. It is obviously a task of highest importance in the hands of the teachers, and surely, no inservice education worth the name can neglect this. So, whatever the methods, inservice education of elementary school teachers should receive urgent attention during the Seventh Plan period. Except in some parts of the country like north-east geographical distribution-wise there is now a well developed network of teacher training institutions. Keeping in view the areas of importance in the Seventh Plan, these institutions should be strengthened and further developed, if necessary by creating new faculties in these institutions to take

care of needs of pre-service teacher training in the fields of non-formal and early childhood education, and in-service training in the fields of early childhood education, elementary education particularly science, languages and physical education and non-formal education. Some of these institutions should also develop as in-service training places for educational supervisors and administrators and teachers of vocational and technology streams. Also, since we want to expose the students to mass-media and technological marvels like computers in schools, it would be logical to re-orient the teacher training to provide for optimum use of these media and for this purpose to properly equip the teacher training institutions with modern teaching aids, radio-TV-VCP and Computers so that the teachers trained in these institutions are adapt at using these modern technological devices for better education.

(ii) Curriculum

15. In this report, we have not gone into the details of a revision of the curriculum at the elementary level, but it needs hardly any argument that it needs revision. First, the burden on the child should be worked out carefully, after some trial. The temptation to give everything to the child at the primary stage has to be checked. Further, there has to be a core curriculum common throughout the country, consisting of minimum language competencies, arithmetical abilities and values like national integration, environmental care, health, sanitation etc. at primary stage. The young student should be steadily exposed to the world of work and technology by organising frequent visits. This is also the stage at which good citizenship qualities should begin to develop in a child. A large part of education at this stage should be non-text book dependant and fullest participation of the child in games and sports and innovative activities should be encouraged. At the middle stage most of these would progressively get formalised into the teaching process. The student would participate vigorously in socially useful productive work and would be formally exposed to mass-media and technological innovations like micro-computers.

(iii) Standards

16. A concern was expressed in the Working Group over low standards of elementary education in general, but more specifically of primary education. There are some studies, although dated, which show that children do not develop competence in reading and writing in their mother tongue, at the primary stage. The learning of arithmetic is equally poor. Irregularity of attendances on the part of both teachers and pupils has been pointed out as one of the prime factors of low achievement. Teaching methods have to improve in order to develop competence in language and arithmetic. Absence of promotional examination from Class I onwards, it has been pointed out, is another reason for low achievement in primary education. There is a certificate examination in some States at the end of primary stage i.e. class IV or V, and also another certificate examination at the end of class VIII. These examinations should be improved so as to

test the achievement of children in language and arithmetic at the primary stage and other subjects at the end of elementary stage. It is important to test for national integration at both the examinations in order to emphasise the importance of the values of national integration to fight prejudices, born of ignorance, in the formative years of childhood. The institution of a National Level Merit Examination tagged with a scholarship scheme should be a welcome move. It will also help in setting standards. It should not be compulsory but made available to all States and Union Territories which want to test their children and try for national scholarship. Such an examination will influence the primary certificate examination as well as the one after Class VIII in due course, thereby helping in the raising of standards.

(iv) **Manpower Needs**

17. In the Seventh Five Year Plan, it is proposed to enrol 250 lakh additional children in formal schools, 100 lakhs in classes I-V, and 150 lakhs in classes VI-VIII. On the basis of teacher-pupil ratio of 1:40 in classes I-V, and 1:35 in classes VI-VIII, 6.78 lakhs more teachers would be required during the Seventh Five Year Plan. At present there are 29 lakhs teachers at the elementary stage of education. The replacement needs at the rate of 2 per cent per annum of these teachers would be 2.9 lakhs teachers during the Seventh Five Year Plan. Thus, the total fresh appointment of teachers to be made during the Seventh Plan period would be of the order of 9.68 lakhs (6.78 lakhs for additional enrolment and 2.90 lakhs for replacement).

18. For meeting the requirement of enrolment in non-formal education centres at the elementary stage, 15.6 lakhs instructors would be required. This would be mostly part-time instructors who will need pre-service training. While most of them will be drawn from the teaching force, in many cases instructors of non-formal education centres could be community leaders, unemployed but educated youth, voluntary workers etc.

19. In 1981-82 enrolment in teacher training institutions at the elementary stage was 81,000. The duration of teacher training courses varies in the States. Taking one year course into consideration, one could assume an annual availability of 60,000 trained teachers. The total output from existing teacher training facilities would, therefore, be of the order of about 3 lakhs in the five years of the Seventh Plan.

20. At present, about 2 lakh trained teachers are on the live registers of the employment exchanges. It is difficult to know whether all of them are unemployed, or whether some of them are employed but registered with the employment exchanges for better jobs. One could, however, assume that all these 2 lakh teachers will be available for teaching in elementary schools in the Seventh Five Year Plan.

21. In middle schools some of the States are recruiting graduate trained teachers. About one lakh trained teachers may be available

from secondary teacher training institutions also, where the teacher training facilities are more than the estimated requirement. Thus, total availability of trained teachers in the Seventh Five Year Plan from existing sources will be about 6 lakhs (3 lakhs from existing institutions, 2 lakhs unemployed, and 1 lakh from teacher training colleges). Facilities will, therefore, have to be created for training 3.68 lakhs teachers during the Seventh Five Year Plan. There is yet no infrastructure in the country for training of teachers of non-formal and early childhood education. Training of such teachers would have to be organised by suitably strengthening the existing teacher training centres and opening some in areas like north-east where such facility does not exist on required scale.

22. For additional enrolment envisaged in the Seventh Plan, about 12,000 additional Inspectors of Schools/Education Extension Officers would be required for strengthening administration/supervision of elementary education.

23. Upgradation of the knowledge and professional competence of teachers would be a major input for improving quality. Most of the 29 lakh teachers employed in the system seldom get an opportunity to upgrade their knowledge of subjects and become acquainted with the new methodologies of training. An attempt should be made to expose these serving teachers to new knowledge and innovative practices at least once in five years.

24. Considering the numbers involved, institutionalised inservice education of teachers will be difficult to provide, not only due to huge cost involved but also due to lack of facilities for training. It is, therefore, necessary to think of a variety of training arrangements. Among others, these would include:

- (a) Inservice education by utilising mass media, as was done during SITE;
- (b) adoption of schools of lower level by institutions of higher levels for upgrading of teacher competencies;
- (c) despatch of teacher guidance notes by training schools;
- (d) publication of bulletins informing teachers of new developments; and
- (e) correspondence materials supported by occasional contact.

Resource Needs

25. A rough estimate of expenditure for achieving the target of 640 lakhs of additional enrolment (250 lakhs in formal school and 390 lakhs in non-formal education centres), establishment of 5000 pre-primary education centres and various other quality improvement programmes, provision of physical facilities, training of teachers, etc. is given in the table below;

Costing of Elementary Education

Item	Five year Cost (Rs. in crores)	Physical Target	Norms Assumed
1. Extension of Facilities	630	Classes I-V 100 lakhs	Teacher-Pupil ratio 1:40 teacher salary Rs. 700/- p.m.
(a) Full time	1233	Classes VI- VIII 150 lakhs	Teacher-Pupil ratio 1:35 Teacher Salary Rs. 800/- p.m.
Total Teacher Cost	1863		
Non-Teacher Cost	280		Non-teacher cost @ 15% of the teacher cost
Total	2143		
(b) Part-time non- formal classes	936	390 lakhs children	Rs. 80/- per student
(c) Pre-primary education	11	5000 centres	
2. School buildings:			
(a) New Schools/ classes	1356		6.78 lakhs class rooms @ Rs. 20,000/- Govt. contribu- tion per class.
(b) Removal of backlog in buildings	800	4 lakh classroom	1/4 of the backlog
3. Equipment	162		Rs. 1000/- per teacher for 6.78 lakh for full time and Rs. 500/- for non-formal education instructors.
4. Incentives	150		125 lakh children Rs. 40 per student per annum (1/2 of the additional enrolment)

5. Teacher Training

- | | | |
|---|----|--|
| (i) Improvement of existing teacher training institutions | 10 | |
| (ii) Training of additional teachers | 37 | Training of 3.68 lakhs teachers @Rs. 1000/- per trainee. |

6. Media support

- | | | |
|------------------------------------|----|--|
| (a) Equipment | 80 | 4,00,000 schools
Rs. 2000/- for radio set,
tape recorder, projector etc. |
| (b) Software purchases/maintenance | 20 | |

7. Quality Improvement (ad-hoc provision)

- | | |
|--|----|
| (i) Science Education | 50 |
| (ii) Strengthening of State Institutes of Education/ NCERT/SCERT | 30 |
| (iii) Socially useful productive work | 50 |
| (iv) Administration and supervision monitoring and evaluation | 50 |
| (v) Other misc. Programmes | 40 |

- | | |
|---|-----|
| 8. Establishment of block level multipurpose resource centres | 323 |
|---|-----|

Total 6248 crores

26. The estimated outlays for the Seventh Five Year Plan mark a substantial step up over the outlays provided for elementary education in the earlier Five Year Plans. These estimates have been worked out on the basis of norms which, if anything, represent the minimum needs of schools. Bulk of the provision will be required for expanding educational facilities, formal and non-formal. Some provisions have been made for removing the backlog, for instance, in respect of buildings.

27. Although the proposed outlays would seem large in the context of Seventh Plan provision, however, these would be the minimum necessary, commensurate with the tasks involved. It is the time that the social and economic implications of mass education are realised. The Steering Group is of the strong view that the future of this nation depends upon the extent to which we are able to eradicate illiteracy and guarantee basic education for all. It needs to be realised that education has been shown to have significant positive relationship with fertility rates. It also generates oneness of and capacity to use innovative practices in production processes, thus contributing to increased productivity. Education also enables a person to take benefit, without depending interpretation of intermediaries, of the facilities and services that have been created for the public. In this sense, it assists in increased participation through access and development inputs and in reducing exploitation.

28. While a major portion of resources for elementary education would be made available in the Education Sector, there are a number of other sectors of development which should be required to earmark funds for education. Programmes being implemented under Integrated Rural Development (IRDP) and National Rural Employment Programme (NREP) must make suitable provision, for instance, in respect of construction of school buildings, in particular. Similarly, agencies like the Khadi and Village Industries Commission, the Handloom Board etc., could assist schools in organising socially useful productive work on more meaningful lines by providing raw materials, assisting in the training of students and instructors and by arranging the sale of finished products. Ministry of Health and Family Welfare can assist in the introduction of school health programme.

29. So far, allocations for elementary education have been made in the State Sector. While the practice would have to continue, it seems necessary that there is increased central intervention in partial financing of elementary education, to realise the constitutional objective by 1990. Since education is now in the concurrent list, there is all the more reason for substantial Central funding in school education. The goal of universalisation of elementary education by 1990 would require so much in financial resources that unless both Centre and States are able to maximise funding in their respective sectors, it is not likely to be achieved. The need for Central funding in key sectors of school education seems inescapable. The Central Advisory Board of Education has, in one of its meetings, evolved a formula for the central assistance for elementary education. The Board had proposed -

- (a) that for each State the magnitude of the task, in terms of the financial requirements to universalise elementary education, be determined;
- (b) that for each State its capacity to provide resources to achieve the goal be determined; and
- (c) that central assistance be given to State to fill the gap between its requirement of funds and the capacity to generate resources for elementary education.

This formula could be considered for adoption.

30. The other alternative would be to identify for Central support, certain key elements of the programme and meet the entire cost on them. For instance, these could include:

- (a) strengthening of training institutions and SCERTs;
- (b) inservice education of teachers;
- (c) technology support;
- (d) non-formal education, particularly for girls;
- (e) strengthening of administration and supervision;
- (f) establishment of monitoring mechanisms;
- (g) diffusion of innovation;
- (h) early childhood education;
- (i) implementation of pilot projects;
- (j) community participation;
- (k) increasing school facilities.

31. It should be noted that the implementation of some of the strategies suggested in this report could meet with some measure of resistance. For instance appointment of part-time teachers may not be welcome in certain quarters specially because there are large number of trained teachers awaiting for jobs. It is a reflection of the pressures on the system that additional posts of teachers are continuously created in preference of other-necessary inputs, although the new teacher appointees may not be willing to serve in rural or distant areas. In practice many teachers seek and succeed in obtaining transfers to urban centres with the result that the overall teacher-students ratio for the whole State is not correct index of the reality. A pre-condition for creation of any additional teacher post in the Seventh Plan should therefore, be by a thorough review of teacher posting with reference to actual or likely attendance of children so that teachers already appointed are optimally utilised. In distant and rural areas where qualified teachers are reluctant to serve it may be much better to employ local teachers, even if less qualified, with appropriate training and orientation. Employment of part time teachers could be considered also for the reason that those with relevant knowledge and skills must be utilised to impart the same. Incidentally this could also have effect of lowering the unit cost of education. But it should be emphasised that without appropriate discipline and control in the matter of creation of additional teacher posts the rest of the strategies may get under-funded and may not have the requisite chance to succeed. Also the programme of non-formal education would require special attention and care and should be endowed with adequate prestige and supported with competent, able and motivated personnel in order to foster the same during the critical initial years.

Open Learning System

32. There is a need for designing an open learning system where children are able to get education that their parents can afford-partly by not allowing their education to interfere with their daily chores - and which they see as relevant to their learning needs.

In an open learning system children learn on their own, in a variety of situations and utilising a variety of learning resources. The minimum level of learning, in terms of abilities, for each of the age groups specified for elementary education should be laid down and then allow the children to reach these levels by choosing the type, time and sources of learning. Under this system, it would not be necessary for a child to formally enrol in a school, although an open learning system includes the school as well as out of school learning. Such an open learning system with flexibility in the matter of time and utilisation of resources could be promoted by developing a new conceptual framework which suggests, among other things, what is significant to learn to enable a person to function creatively and productively in a particular social milieu.

33. While advocating open learning systems it will be necessary to insist that the "minimum learning continuum" is not advocated only for those who, because of certain social and economic handicaps, are unable to take advantage of the formal system. The effort should be to lay down the minimum abilities which should be promoted among all the children through formal system or through other non-formal approaches and suggest the quantum of learning that is necessary for the purpose. These learning abilities should be expected of every child, although the modes through which they are attained may vary. If this is done, it would be possible to ensure an equivalence of what is done in the formal system and what is promoted in non-formal arrangements.

34. Non-formal education would be one of the important components of this new design. Non-formal education centres have been set up in different states for out-of-school children, particularly with central assistance. Although most of these centres provide education which is basically a condensed form of what is taught in schools, some experimental approaches where content of education is derived from different sources, are at present being implemented. NCERT's project on Comprehensive Access to Primary Education (CAPE) visualises the development of textual materials in relation to problems faced in specific communities, establishment of learning centres where out-of-school children can study these materials and certification of the competencies attained by students to facilitate their entry into the formal system if they so desire. It would be necessary to promote in the Seventh Five Year Plan a variety of non-formal approaches to education, covering a much larger number of out-of-school children at present. Since non-formal education in the Seventh Plan would expand at a fast pace, it is necessary that the ad-hoc system created in past few years is reviewed comprehensively so that in the Seventh Plan a non-formal system really functions to deliver the goods. Since both formal and non-formal systems would be used to achieve the common goal of universalisation of elementary education and increasing the access to education for the disadvantaged, the non-formal system should at once be both viable and supplementary to formal system. The non-formal centres should preferably come up in rural areas where school is not within easy reach and in urban areas in the localities of disadvantaged groups. Also, these centres should continue to be run till the local community reaches an optimum level both in terms of enrolment and retention.

Much more textual material with area specific background and supplementary reading materials should be developed and made available so that products of this system are not inferior to that of formal system. Adequate teacher training arrangements should be made for teachers of non-formal system. For optimum use of resources the school system, the non-formal system and adult education system should develop linkages and be educationally integrated.

Linkages with Development

35. It is assumed that the content of elementary education - if we think in terms of abilities to be attained - must be derived, broadly speaking, from roles and functions that a person has to perform in a given social situation. Since most of the children after leaving school will assume participatory roles in the development process, it will be necessary to develop linkages between elementary education - both formal and non-formal - and development programmes in specific areas. A point to consider would be whether the content of elementary education should not be derived, to a substantial extent, from the analysis of the roles that a child plays or is expected to play in a given community situation. The question of non-formal education centres being run by employing/developmental agencies with educational authorities giving pedagogical support could also be considered.

36. Attention need be given to evolving multi-faceted approaches to developmental problems in contrast to the segmentary approaches adopted by different developmental agencies as at present. Time and again, it has been demonstrated that development required integrated approach and the problems of communities, be they social, concerned with productivity or health and hygiene, are basically educational in nature. Unless people are equipped with knowledge and skills which make them self-reliant, it would be difficult to promote development on a continuing basis. Education, particularly elementary education, from this point of view remains the central element in the development process. The experience provided by the UNICEF aided project, Development Activities for Community Education and Participation (DACEP) provides an approach for making a primary school the focal point for a variety of educational services to the local community.

37. Block level planning and implementation would be essential for achieving universal elementary education since national and state aggregates, either in the form of availability of facilities or enrolment ratios do not indicate the disparities that exist spatially and/or in respect of various segments of the population. These disparities can be removed only by identifying at micro-levels the specific handicaps which prevent certain section from taking advantage of educational facilities, and by implementing programmes in relation to them.

38. It is essential that appropriate linkages are established in the programmes of pre-school education, elementary education both formal and non-formal, secondary education, and adult education. While pre-school education enables the children to move into the formal system at the elementary stage and continue in the secondary stage,



spread of adult education will influence the parents to send their children to schools or non-formal education centres. Integration of administrative and supervisory levels in respect of elementary education both formal and non-formal and adult education will result in more effective utilisation of limited resources.

39. The need for some form of community involvement and control on elementary education, can largely be over-emphasized. Teachers absenteeism is reported to be quite substantial. Administrative machinery, the growth of which has not been in proportion to the expansion of educational facilities, is not able to keep track of schools and the teaching learning process. While safeguards will need to be provided for particularly preventing harassment of teachers, local communities must be allowed to have some decision making authority vis-a-vis elementary education. It would be worthwhile in this context to have some specific programmes in the VII Plan which would on the one hand motivate community contribution to school development and on the other hand simultaneously provide for participation of school in activities beneficial to local community. Without such an arrangement, it is not fair to expect that community will be forthcoming to support the local institution.

40. Some voluntary organisations have done pioneering work in the field of education. During the Seventh Five Year Plan, effort should be made to involve such organisation for the spread of pre-primary education and elementary education including non-formal, part-time education.

Technology Support

41. In recent years substantial progress has been made in communication technology which has made it possible to reach isolated and distant populations. India is one of the countries where pioneering work has been done in the utilisation of mass-media for education. While radio support to education has been available in some form or the other for over 40 years, the SITE as well as the availability of INSAT has provided experience in the utilisation of television for educational purposes. It would be necessary to build upon this experience and ensure that the technology that has now become available is increasingly harnessed for achieving the goal of universal elementary education.

42. Radio and television can play an important role in providing support to class room instruction, enrichment of the learning of children, providing information on national concerns/issues, upgradation of the knowledge and professional experience of teachers. While these roles will continue to be performed, it would also be necessary to consider whether television and radio programmes could in some specific subject areas substitute the utilisation of an intermediary, like the teachers. It should, for instance, be possible to identify topics in the school syllabus which need not be dealt with through classroom instruction. As media literacy grows, children should on their own be in a position to interpret messages that are transmitted to them through radio and television.

43. Radio and television would be particularly useful as sources of learning for these children who are unable to join regular full-time classroom instruction. Community viewing sets can be utilised for providing useful education and training to out-of-school children. With basic skills of literacy and numeracy having been attained, one can also think of utilising distance learning techniques for providing further education to children without necessarily requiring them to attend schools. It would, however, be necessary that, apart from correspondence materials, supported by radio and television broadcasts, there should be some provision for personal contact. This could be provided by existing schools and learning centres that are proposed to be set up.

44. Schools and learning centres would need to be provided with facilities essential for utilisation of the new technology. Apart from radio and television receiving sets, it would be desirable to provide to elementary schools equipment for projection of films, film strips, tape slides, etc. and also a library where, apart from materials, non-print materials, like audio-tapes, films-strips, etc. are available for use by teachers and students.

Quality of Education

45. In the Seventh Five Year Plan and in subsequent plan, increasing emphasis needs to be given to the enhancement of the quality and efficiency of elementary education. As has been indicated earlier, the ultimate success of the programme of universalisation of elementary education can be determined in terms of knowledge, attitudes and skills of school leavers and how they are able to utilise them in actual life situation. In our concern for enrolling the non-enrolled children, we tend to understress the needs of those children who are already in schools. The large scale deficiencies from which elementary schools suffer is indicative of the inadequate attention that has been given to the provision of quality education. The continuing high drop out rates are also perhaps a direct result of inadequately provided schools and uninspiring environment of the schools. The Seventh Five Year Plan needs to rectify the position and provide earmarked funds for those programmes which will enhance the efficiency of the system. It should be possible to identify inputs which improve/enhance the efficiency of the system. Provision of a reasonable building where classes can be held, a small library which children can use and availability of school furniture and teaching aids are some of the essential items which would improve the content of education.

46. Similarly there is need to have a fresh look at textual material in use in schools. Various projects in last few years like population education, UNICEF assisted projects, environment and life education and the like have led to development of appropriate material. What is needed is that the results of these efforts should be made use of by the system at large. One of the obvious ways of doing so would be to review or rewrite text-books to incorporate the results of these endeavours.

47. The elements of the new design for elementary education which have been discussed above would require to be integrated into a systematic plan of action. From this point of view, it is desirable to identify specific areas where the total strategy required for universalising elementary education can be implemented. Various institutions - NCERT, NIEPA, SCERT etc. could be asked to develop a comprehensive plan of action and implement it in selected blocks. The Planning Commission should earmark funds for implementing, on a pilot basis, the integrated programme of elementary education in these blocks. For monitoring and coordinating the activities of various agencies, the Planning Commission should help in setting a separate unit for elementary education in the Ministry of Education and at State headquarters.

LIKELY ENROLMENT IN CLASSES I-V IN 1984-85

(Enrolment in 000's)

Sl. No.	States	Enrolment			Enrolment as percentage of the age-group		
		Boys	Girls	Total	Boys	Girls	Total
1.	Andhra Pradesh	3601*	2710	6311	112	82*	97*
2.	Assam	1275	1112	2387	99	92	95
3.	Bihar	5041	2920	7961	110	68	89
4.	Gujarat	2696	2092	4788	126	98	110
5.	Haryana	905	605	1510	107	75	91
6.	Himachal Pradesh	346	274	620	107	85	96
7.	Jammu & Kashmir	433	275	708	122	72	95
8.	Karnataka	2295	1875	4170	97	78	88
9.	Kerala	1645	1553	3198	109	105	106
10.	Madhya Pradesh	4150	2150	6300	95	54	75
11.	Maharashtra	5127	4029	9156	121	100	111
12.	Manipur	109	110	219	113*	99*	106*
13.	Meghalaya	110	104	214	121	116	119
14.	Nagaland	64	57	121	129	116	123
15.	Orissa	1905	1253	3158	109	76	93
16.	Punjab	1064	907	1971	110	100	105
17.	Rajasthan	3040	1260	4300	125	55	91
18.	Sikkim	39	26	65	178	119	149
19.	Tamil Nadu	3733	3152	6885	104*	89*	97*
20.	Tripura	211	168	379	145	113	129
21.	Uttar Pradesh	7756	3561	11317	92	47	70
22.	West Bengal	4434	3223	7657	107	81	94
Total States							
Union Territories							
23.	A & N Islands	20	16	36	161	134*	147*
24.	Arunachal Pradesh	49	26	75	130	72	101
25.	Chandigarh	34	26	60	118*	87*	102*
26.	Dadra & Nagar Haveli	8	6	14	100*	87*	93*
27.	Delhi	396	345	741	108	90	97
28.	Goa Daman & Diu	76	65	141	119*	102*	111*
29.	Lakshadweep	4	4	8	177	150	168
30.	Mizoram	45	42	87	103	102	103
31.	Pondicherry	42	39	81	125	114	119
Total Union Territories							
Grand Total		50653	23985	84638	106@	74@	91@

* Relate to 1983-84

@ Estimated.

STATEMENT NO. II

LIKELY ENROLMENT IN CLASSES VI-VIII IN 1984-85

(Enrolment in 000's)

Sl. No.	States	Enrolment			Enrolment Ratio		
		Boys	Girls	Total	Boys	Girls	Total
1.	Andhra Pradesh	860	590	1450	53*	32*	45*
2.	Assam	626	442	1068	69	58	64
3.	Bihar	1515	496	2011	57	20	39
4.	Gujarat	912	520	1432	72	44	58
5.	Haryana	395	165	560	80	36	59
6.	Himachal Pradesh	164	94	258	89	51	70
7.	Jammu & Kashmir	150	80	230	74	49	56
8.	Karnataka	860	570	1430	48	31	39
9.	Kerala	967	921	1888	97	91	93
10.	Madhya Pradesh	1287	486	1773	53	21	38
11.	Maharashtra	1812	1118	2930	71	44	58
12.	Manipur	41	47	88	78*	65*	71*
13.	Meghalaya	25	21	46	55@	42@	50@
14.	Nagaland	32	25	57	121	96	100
15.	Orissa	507	271	778	51	29	40
16.	Punjab	540	330	870	92	65	72
17.	Rajasthan	841	250	1090	62	20	41
18.	Sikkim	9	5	14	74	35	55
19.	Tamil Nadu	1369	895	2264	83*	54*	69*
20.	Tripura	53	38	91	65	42	53
21.	Uttar Pradesh	2802	997	3799	59	24	42
22.	West Bengal	1515	1105	2620	66	51	59
Union Territories							
23.	A & N Islands	7	6	13	101	96	99
24.	Arunachal Pradesh	11	6	17	52	30	41
25.	Chandigarh	21	15	36	102*	76*	90*
26.	Dadra & Nagar Haveli	2	1	3	50*	26*	38*
27.	Delhi	228	173	401	90	72	81
28.	Goa, Daman & Diu	43	34	77	102*	77*	90*
29.	Lakshadweep	2	1	3	127	94	111
30.	Mizoram	19	16	35	85	81	83
31.	Pondicherry	23	28	51	111	128	120
Total		17637	9746	27383	64@	37@	51@

@ Estimated

* Relate to 1983-84.

STATEMENT III

Targets of Additional enrolment for the Seventh Plan in Classes I-V

(in 000's)

SL. No.	States	Likely additional enrolment in VI plan			Targets for VII Plan		
		Boys	Girls	Total	Boys	Girls	Total
1.	Andhra Pradesh	544	585	1129	200	500	700
2.	Assam	300	385	685	200	300	500
3.	Bihar	460	1040	1500	500	900	1400
4.	Gujarat	187	392	579	200	300	500
5.	Haryana	123	224	347	200	200	400
6.	Himachal Pradesh	48	60	108	-	60	60
7.	Jammu & Kashmir	100	90	190	40	100	140
8.	Karnataka	182	229	411	300	400	700
9.	Kerala	(-) 19	(-) 11	(-) 30	50	50	100
10.	Madhya Pradesh	868	582	1450	500	700	1200
11.	Maharashtra	456	530	986	400	200	200*
12.	Manipur	24	44	68	25	40	65
13.	Meghalaya	11	8	19	10	10	20
14.	Nagaland	9	11	20	-	5	5
15.	Orissa	243	195	438	300	300	600
16.	Punjab	-(77)	-(19)	-(96)	50	50	100
17.	Rajasthan	981	597	1578	300	800	1100
18.	Sikkim	10	10	20	-	-	-
19.	Tamil Nadu	299	358	657	-(300)	-	-(300)*
20.	Tripura	65	63	128	-	30	30
21.	Uttar Pradesh	1384	616	2000	1000	900	1900
22.	West Bengal	531	727	1742	500	800	1300
Total States		6729	6716	13445	3675	6645	10320
Union Territories							
1.	A. & N. Island	6	4	10	-	-	-
2.	Arunachal Pradesh	12	9	21	5	15	20
3.	Chandigarh	11	9	20	10	15	25
4.	Dadra & Nagar Haveli	-(2)	-	-(2)	-	1	1
5.	Delhi	50	47	97	100	100	200
6.	Goa Daman & Diu	9	7	16	8	12	20
7.	Lakshadweep	-	1	1	-	-	-
8.	Mizoram	11	11	22	3	5	8
9.	Pondicherry	1	4	5	-	-	-
Total UTs		102	92	194	126	148	274
Grand Total		6831	6808	13639	3801	6793	10594

or say 100 lakhs.

* Minus enrolment due to lower levels of under age and over age

STATEMENT IV

Additional Enrolment Targets for the Seventh Plan in Classes VI-VIII

(In 000's)

States	Likely Achievement in Sixth Plan			Target for Seventh Plan		
	Boys	Girls	Total	Boys	Girls	Total
1. Andhra Pradesh	323	315	638	800	800	1600
2. Assam	223	183	406	300	350	650
3. Bihar	625	275	900	1000	700	1700
4. Gujarat	221	113	334	300	300	600
5. Haryana	75	55	130	100	150	250
6. Himachal Pradesh	42	40	82	-	50	50
7. Jammu & Kashmir	37	26	63	50	60	110
8. Karnataka	119	121	240	400	300	700
9. Kerala	128	169	297	200	180	380
10. Madhya Pradesh	375	182	557	800	500	1300
11. Maharashtra	439	345	784	400	700	1100
12. Manipur	20	34	54	20	20	40
13. Meghalaya	6	4	10	10	20	30
14. Nagaland	9	7	16	4	7	11
15. Orissa	136	99	235	300	300	600
16. Punjab	133	76	209	100	200	300
17. Rajasthan	262	115	376	500	300	800
18. Sikkim	5	3	8	2	3	5
19. Tamil Nadu	267	230	497	400	500	900
20. Tripura	17	12	29	20	25	45
21. Uttar Pradesh	682	325	1007	1000	900	1900
22. West Bengal	505	431	936	900	800	1700
Total States	4649	3160	7808	7606	7165	14771
Union Territories						
1. A. & N. Island	2	3	5	1	3	4
2. Arunachal Pradesh	5	4	9	8	8	16
3. Chandigarh	10	7	17	2	7	9
4. D. & N Haveli	1	-	1	1	1	2
5. Delhi	53	45	98	32	80	112
6. Goa, Daman & Diu	5	5	10	2	10	12
7. Lakshadweep	-	-	-	-	-	-
8. Mizoram	6	5	11	5	5	10
9. Pondicherry	5	14	19	-	-	-
Total UTs	87	83	170	51	114	55
Grand Total	4736	3243	7978	7657	7279	14936

STATEMENT V

Target of Non-Formal Education
at Elementary Stage in the Seventh Plan

S. No.	States	In lakhs
1.	Andhra Pradesh	29
2.	Assam	5
3.	Bihar	50
4.	Gujarat	13
5.	Haryana	7
6.	Himachal Pradesh	-
7.	Jammu & Kashmir	3
8.	Karnataka	24
9.	Kerala	-
10.	Madhya Pradesh	46
11.	Maharashtra	14
12.	Manipur	-
13.	Meghalaya	-
14.	Nagaland	-
15.	Orissa	19
16.	Punjab	5
17.	Rajasthan	30
18.	Sikkim	-
19.	Tamil Nadu	8
20.	Tripura	0.5
21.	Uttar Pradesh	103
22.	West Bengal	30
Total States		386.5 say 390 lakhs.

CHAPTER - IV

Secondary Education

Secondary education is a crucial stage in the system of education. It provides the foundation for the pursuit of scholarship, at the same time, it constitutes the earliest stage of interface between education and the world of work. At present, secondary education is the weakest link in the educational system in the country. It mostly prepares the children for higher education. The products of secondary education are generally unemployable with the result that the number of matriculate job seekers on the live registers of the employment exchanges has been swelling from year to year. Efforts have been made to reform secondary education system since the Second Five Year Plan, especially after the submission of the report of the Education Commission (1964-66) and the adoption of the Resolution on the National Policy on Education. However only much more remains to be done in several directions to achieve the desired results. Since secondary education is of great significance for the country's social and economic development, special attention should be paid to its development on proper lines in the Seventh Plan.

Uniform Educational Pattern

All the States, except Himachal Pradesh and Haryana, have switched over to the 10 plus 2 pattern at the secondary stage of education and even these two have decided to switch over to 10+2 pattern beginning in 1985-86. It will facilitate the students to move from one State to another without disrupting their educational career and will help to maintain comparable standard of education in all the States in the country and will enable planning of quality improvement programmes, promotion of innovations and introduction of reforms on a national scale. As far as possible plus 2 stage may be located in the school system.

Expansion of Education

The demand of secondary education has been growing with the expansion of facilities at the lower stage. In expanding the facilities special attention will have to be given to the development needs of the backward areas, under-privileged sections of the population and of girls. The tendency of making education free for all upto the secondary stage should be discouraged and measures taken to ensure equality of access to secondary education, particularly for the socially and economically under-privileged.

Keeping in view the likely increase in student population at the secondary stage necessary provision has to be made for additional facilities by expansion of existing schools, opening of new schools where needed, and by promoting long distance education and open school system. The unplanned growth of high/higher secondary schools should,

however, be checked. Norms for establishment of secondary schools should be established and schools should be opened strictly according to the norms. It is suggested that during the Seventh Plan, new secondary schools should be established where a clear local need is established and there is reasonable chance of a new school growing into an economically viable and educationally efficient institution. Keeping in view the past trends of enrolment for secondary education stage provision may be made for an additional enrolment of about 36 lakh students 22 lakhs in high schools stage (Classes IX and X) - 14 lakhs at higher secondary stage (Classes XI and XII) - during the Seventh Plan.

Languages

Generally the three language formula has not been implemented in the spirit in which it was introduced. The position regarding the implementation of three language formula varies from state to state. In some states three languages are taught in classes VI to VIII, two languages in classes IX and X and one language in XI and XII while in some other states two languages are taught in classes IX to XII.

One of the difficulties experienced in the introduction of the three language formula is the paucity of teachers in languages other than the regional language. Another difficulty relates to the paucity of time at secondary and higher secondary stages in view of the other academic courses which must be given adequate weightage. However, considering that language is the vehicle for learning of all other subjects and importance of learning of second and third language for national integration, it is suggested that three language formula may be implemented earnestly in the country. Keeping in view the demands of academic courses in higher classes and the fact that students learn languages easily at an early stage it is suggested that three languages may be taught in classes VI-VIII, two languages in classes IX-X and one language in classes XI-XII.

Science Education:

The teaching of science at high/higher secondary stage of education needs to be made universal and uniform and the facilities accordingly strengthened. Efforts should be made to update and modernise science curricula, improve the laboratories and libraries in schools and upgrade the competence of science teachers. Since the cost of laboratory equipment is high and the quantity needed is considerable, the production of scientific equipment on a large scale and at modest cost should be encouraged. Regional production centres for the manufacture of science kits and laboratory equipment may be set up. Central assistance should be made available to the states for strengthening of teaching of science in secondary education and for opening of additional science sections at the higher secondary level. Similar attention should be paid for improvement of teaching of mathematics.

Socially Useful Productive Work

SUPW/Work Experience Programmes have been accepted in principle for a long time. Establishment of Basic Schools throughout the country was an early positive step but could not gain roots due to certain inherent complexities in the context of fast changing socio-economic conditions of the society. Work Experience recommended by Education Commission (1966) was a laudable effort to bridge the gap between work and education. The concept of SUPW accepted in 1977-78 envisaged purposive, meaningful manual work resulting in either goods or services useful to the community as an integral part of the entire spectrum of school education.

These concepts have also been implemented by many of the States and UT's under one name or the other for a long time but have not made a significant impact as was envisaged. Since the problem remains, an urgent need is there to provide fresh direction and impetus for its more effective implementation. The general aim of the work education programmes should be the linkage of education with the world of work, reduction of gap between the manual and intellectual work, and work both as an area as well as the medium of education at all levels. However, these aims must not yield differentiated curricula either to exploit or conform to the existing disparities or in any way, to promote them. The individual aspirations should be respected and honoured and the concept should find acceptance on the basis of its own intrinsic merit. The contents of SUPW should, therefore, provide for strong linkages with other academic subjects so that the acquired knowledge could be applied for the actual benefit of the community.

Specifically while the SUPW concept of participation in a large number of activities drawn from the areas of human needs may continue for the elementary stage of education for the time being, there is a need to develop certain programmes of pre-vocational character for more structured and effective implementation. A school can select an area of community specific production process around which the theoretical learning and practical work within the school and outside may revolve. This may allow for closer linkages between theories learnt and skills acquired and their real life applications.

It will also allow for better utilisation and integration of the community expertise in the teaching-learning process. A cluster of three to four schools with a given pre-vocational course may feed to the school offering a corresponding course for vocational studies at the higher secondary stage. Besides, the support system for development, training, management and supervision available or being developed for vocationalisation may also be utilised for the secondary stage SUPW (pre-vocational) programme. The pace of expansion in such an organised fashion will get automatically linked with the expansion of vocationalisation programme and would eventually cover all the secondary schools of the country in a phased manner. This strategy would also alleviate the difficulties presently encountered in the area of conceptual clarity, community acceptance, vertical linkages, standards of achievement, pedagogical and managerial inputs and several other constraints experienced during the preceding decade.

The financial constraints have also affected the SUPW programme to a great extent. While eventually the programme should be self sustaining and remunerative as desirable, some financial provisions must be made for certain components of the programmes. These may involve

1. Staff salary for SUPW cells in each state exclusively charged with functions in the area of SUPW/WE. This may be properly dovetailed with similar staff component required for the vocationalisation programme.
2. A modest programme budget for this Cell for developing materials, conducting training programmes and undertaking other promotional activities.
3. A separate budget component for holding District level, State level and National level SUPW/WE exhibitions for children and teachers and also for instituting a system of awards.
4. Payment of salary and allowances for special teacher/part time specialist teachers and some needed infrastructure in secondary level schools offering pre-vocational programme.

Vocationalisation of Education

The two year higher secondary stage of education is important because it marks the terminal stage of formal schooling for nearly half of those students who join it. In absolute terms, the number may now be over a million each year. It is also important because it provides the bridge between the general education of the secondary stage and higher education in arts and science colleges or professional institutions.

Vocationalisation of education at this stage is perhaps the most important aspect of the 10+2 pattern. Diversification is the proper term, the aim being to channelise a considerable proportion of the student population into programme of education in much wider fields in conformity with their interests, aptitudes and abilities. In the absence of such diversification leading to a meaningful and productive ability at the end of formal schooling, the country may have no other choice but to provide for more expensive and often unproductive higher education on a much larger scale, in order to cope with the consequences of universalisation of elementary education. Vocationalisation of higher secondary education is also a national imperative for an effective correction in the supply system of manpower, to keep pace with the planned developmental activities.

In view of the importance of linking education with productivity a major impetus has to be given in the Seventh Plan and the subsequent Five Year Plans to vocationalisation of higher secondary education. The schools have, therefore, to be encouraged to introduce vocational stream in the plus 2 stage on a large scale.

Facilities of vocational education at the plus 2 stage should be suitably diversified to cover a large number of fields such as agriculture, industries, trade and commerce, medicine and public health, home management, arts and crafts, secretarial training, entrepreneurial training etc., but it will have to be ensured that there is no duplication of courses in technical vocational institutions and in schools.

In designing vocational courses, the schools should keep in mind the regional needs and local employment opportunities.

More courses which have a relevance to rural needs, for example, those dealing with agriculture and allied sectors, should be introduced. Other emerging areas such as those in computer technology may also be planned to meet the projected manpower requirements.

The vocationalised courses should not be terminal in the sense that a student is unable to go for higher education, but at the same time, the vocationalisation should be of adequate level to ensure that the skill obtained will be of meaningful help and use in one's career.

The vocationalisation programme should be enlarged further in scope so as to include practical training and also to ensure that an adequate level of skills is imparted.

Suitable instruction material for the programme should be developed based on vocational survey and regional manpower surveys.

Minimum qualification for recruitment to the services in Government and public sector undertakings should be so modified that wherever possible preference is given to those completing the vocationalised stream.

Considering that inadequately provided vocational courses with few linkages with employment market has not made a headway so far, substantial central and state funding and elaborate linkages with employers would be needed in the Seventh Plan to make this a success. It seems clear that without direct central funding this programme may continue to stagnate in Seventh Plan also, as earlier. The scheme of Central assistance should provide for (i) macro-management system at national, regional and state levels, (ii) national network for developmental and technical support employing the resources and expertise available under various central and state Governments and public sector undertakings, (iii) recurring and non-recurring expenditure at the school level including the cluster of schools offering SUPW (pre-vocational) programme, and (iv) career teachers at school level and vocational guidance counsellors at the district level.

Educational Technology

In recent years substantial progress has been made in communication technology which has made it possible to reach schools in isolated and district places. Experience has already been gained for utilisation

of mass media for improvement of education in the country. It would be necessary to build upon this experience and ensure that the technology that has now become available through INSAT is increasingly used for improving the instruction at the secondary stage.

Computers have become common place in most of the developed countries. With the reduction in cost of equipment the schools system in the country will also increasingly begin to use computers as aid to instruction. The decision to make a small beginning for providing computer literacy/education to students in selected secondary schools has already been taken. The possibility of expansion of the programme during the Seventh Plan need to be explored.

Teachers

Improvement in the quality of secondary education needs, as a pre-requisite, the improvement of the quality and preparation of teachers. The training needs must receive consideration.

The expansion needed for secondary education has already been discussed. The output of the existing teacher training colleges will be about 3.5 lakhs during the Seventh Plan. Taking the projected growth in view, and the fact that there is a large number of unemployed trained graduates in the country it is felt that no additional teacher training institutes are required during the Seventh Five Year Plan. However, new models and unconventional and innovative methods are being developed in the field of education. It is, therefore, necessary that in-service training is provided to a teacher at least once in five years. An ad-hoc provision of Rs. 50 crores is proposed for in-service training and improving the existing training institutions.

Core-curriculum and revision of text-books

The NCERT brought out "The curriculum for the Ten Year School framework". It also brought out a corresponding document for the higher secondary education titled, "Higher Secondary Education and its Vocationalisation". These curriculae and their subsequent modified versions were accepted by CBSE and many states and UTs. Yet all the states and UTs have not adopted the national framework. There are many instances of major deviations. It is thus advisable to review these documents on the basis of the experiences gained and recommend a core curriculum developed in consultation with the states that would ensure, at least broad uniformity and certain standards of education throughout the country. Although there should be a unified core-curriculum yet the implementation of that curriculum may continue to be the responsibility of state governments.

The low-cost quality textbooks that were developed during mid-seventies were provided to school concerned and constituted an important component for the quality improvement of secondary education. These have been in use for nearly a decade. Steps must be taken during the early years of the Seventh Plan to update these

textual materials or to develop new materials wherever necessary so that benefit of material developed in past few years like in the fields of ecology, population education, computer literacy becomes available to students at large.

Equalisation of opportunities

Access to education and training is a key factor reducing the gap between the socio-economic groups and between the sexes. Lack of education and training in basic skills is one of the causes for vicious circle of under-development, low productivity and poor condition of health and welfare. The enrolment of girls at the secondary stage is only 30 per cent of the total enrolment. While the scheduled castes and scheduled tribes constituted about 15 and 7 per cent respectively of the total population in the country, their enrolment in the total enrolment at secondary stage is 10 and 3 per cent. Efforts have, therefore, to be made to equalise educational opportunities for girls and weaker sections of the society including education in the rural areas. Special schemes may have to be evolved during the Seventh Plan to ensure that opportunities for education, to cover more adequately, rural areas, girls, SC/ST students and other weaker sections.

A centrally sponsored scheme with 100% central assistance for the integrated education of the physically handicapped children may continue during the plan.

Monitoring and Evaluation of Schemes

For proper implementation of various national schemes such as vocationalisation of secondary education, integration of education and work, strengthening of science teaching and mathematics, equalisation of education, population education, education for national integration there is need to set up a collaborative centre-state machinery which can continuously monitor these programmes and take appropriate steps to ensure that the progress in different spheres is according to plan.

Common School Complexes

The Education Commission had recommended in 1966, the institution of school complexes with a view to enabling the schools in the neighbourhood to utilise the available resources and to make a concerted effort to improve the quality of education through inter-institutional cooperation. Though the idea of school complexes has been implemented in certain parts of the country, it needs further improvement and strengthening in the Seventh Plan. It will help optimise resource utilisation, increase relevance and foster concerted efforts to benefit local areas. This can be done by giving necessary initial support by the Central Government to pilot schemes and providing training and orientation to the personnel concerned with the planning and implementing of such innovations.

Value-Oriented Education

In the present system of education, the emphasis is on the mental development of students and even in the domain of mental development, preponderant importance is being given to those qualities which are related to the present examination system. As a result, education has been reduced to imparting of information rather than to learning; the trend towards a kind of uniformity has tended to make the system rather rigid and autonomous of diverse socio-cultural needs. It is being increasingly realised that this type of education is not sufficient. Education has a crucial contribution to make in respect of promoting national integration, understanding and a sense of togetherness and harmony. There is great need for an integral and value-oriented education. This programme should be so designed that its various threads can be easily woven to the complex totality of personality development, national character and cultural heritage and social development. Suitable revision of text-books and strengthening of school libraries would be important from this point of view.

Open School

A large number of students desirous of education cannot be able to get it due to various economic and other constraints. The facility of Open School should be made available to such children. Open school will enable the children to get further education at their own time and pace without having to attend the formal schools. The present facility of Open School should be extended in the Seventh Plan on state basis, help meet the needs of flexible and varying combination of subjects of study and of the diverse purposes of such a study. This will be a logical development of the non-formal education project for the children in the 9-14 age-group. Such Open School will cover about 10% of the projected additional enrolment in the Seventh Plan.

Financial Outlays

An amount of Rs. 1820 crores may be required during the Seventh Plan for expansion as well as for improvement of secondary education. The scheme-wise outlays are given below:

CHAPTER V

HIGHER EDUCATION

The Working Group on Higher Education reviewed the developments in higher education and noted that as a result of the efforts in recent years, the growth of student enrolment has come down from 11% in the 60's to about 3.8% in the 70's. However during the last 5 years, the rate of growth has registered an upward trend and has been in the region of 6% per annum. During this period, efforts have been made to equip the universities and colleges with infrastructural facilities within available resources, and to ensure the maximum utilisation of the available facilities within available resources, and to ensure the maximum utilisation of the available facilities with a view to reduce the existing regional imbalances in the development of higher education. In the Sixth Plan, about 90 universities and 3200 colleges have been provided with assistance for additional infrastructural facilities and purchase of books and equipments. However, there still exists perceptible imbalances in the development of higher education at the regional and sub-regional levels and between rural and urban areas. Equalisation of educational opportunities is still a distant goal. There have been little or no attempts to re-organise the system. The problem of numbers as well as the existing rigidities of the system continue to affect the standard of education and its relevance to national needs.

For the Seventh Plan, the Working Group on higher education has emphasised on the programme of non-formal education involving distance/open learning programmes on a massive scale to provide facilities for higher education for a substantial part of the projected additional enrolment (roughly over ten lakhs); restructuring of under-graduate courses to make them more relevant and meaningful in terms of national development goals; improvements in the quality and standard of higher education specially at post-graduate and research levels; support for research in universities both in terms of National R & D efforts and pursuit of excellence, and greater attention to the strengthening of existing infrastructure including management.

For achieving these objectives, the following programmes and thrust areas have been identified for higher education in the Seventh Five year Plan:

- i) Re-organisation of under-graduate education to make it more relevant, based largely on the UGC guidelines, should be a programme of high priority. The new design for under-graduate courses should be a foundation course involving 25% of the curriculum core courses involving 50% of the curriculum, limited to two subjects, and application-oriented courses accounting for the rest. Flexibility should be provided in the combination of the subjects. The objective of the application-oriented courses is not necessarily employment-orientation of graduates, but improvement in their employability. These courses should develop creativity in the students and equip them with the

(Figures in Lakhs)

	State Rs.	Centre Rs.	Total Rs.
A. Expansion			
1. Teaching Cost	73300	-	73300
2. Non-teaching cost	31400	-	31400
3. Building cost	18000	-	18000
4. Science Laboratories in new up-graded schools	12000	-	12000
TOTAL(A)	134700	-	134700
Quality Improvement and Other Schemes			
1. Vocationalisation of Education	17800	12600	30400
2. Socially Useful Productivity Work	-	400	400
3. Teacher training	5000	-	5000
4. Other Programmes	-	2500	2500
5. Special schemes for Girls, SC/ST and other weaker sections of society	-	6700	6700
6. Integrated Education of Physically handicapped	-	1500	1500
7. Open Learning	1600	-	1600
TOTAL(B)	24400	23700	48100
GRAND TOTAL (A and B)	159100	23700	182800

skills and techniques which may help them in finding employment or facilitate self-employment. The foundation courses as well as the application-oriented components should provide value-orientation, and the latter should also aim at improving productivity and linking education with employment. The implementation of this new design for under-graduate courses would be possible only if the application-oriented part of the programme is locally developed and administered. The colleges should be given the necessary freedom and flexibility for developing and conducting application-oriented courses, subject to the overall guidance of a Board of Under-Graduate Studies to be set up by each university. Efforts should be made to develop material for the foundation course at the national level so that the forces of national integration and unity can be strengthened.

- .ii) The demand for higher education would continue to rise in the coming years with the expansion of secondary education and increase in the aspirations of the people, particularly the first-generation learners. Till the programme of vocationalisation at the secondary stage is successfully implemented, and the pressure on higher education reduced through an effective policy of delinking degrees from jobs, it would be necessary to provide facilities for higher education for all who demand it. This demand, cannot obviously be met by the existing institutions, nor can resources be allotted for a substantial expansion to meet this demand. While some provision has to be made for the expansion of the formal system, it is essential that a programme of non-formal education involving distance education/open learning system is taken up on a massive scale right from the beginning of the Seventh Plan, taking full advantage of the opportunities provided by INSAT-IB becoming operational so that the programme of distance education could be spread to all corners of the country. The establishment of a National Open University, as a pace setting institution with the responsibility for training of personnel, production of programmes and development of material for utilisation through the electronic media, should be considered. The University should function as a National Resource Centre responsible for coordination of programmes and development of models for all distance education programmes, documentation of information and organisation of appropriate research programmes. In addition to courses leading to degrees and diplomas, the open university should offer general enrichment programmes, besides programme designed to improve the knowledge, skills and productivity of serving personnel. The programme of the university should be flexible enough to permit the pace of progress of studies of individual students to meet their needs. A network of study centres should be provided for personal contact programmes and to supplement the efforts of the open university.

- iii) The six centres of educational technology proposed to be developed by UGC should serve as regional centres with a view to cover the entire country under this programme on regional basis. These centres should support distance/open teaching and learning programmes, correspondence courses and should generally be responsible for the production of software for educational technology and training of personnel for the purpose. These centres should also draw support from other agencies in the neighbourhood and involve the electronic media in a big way. Users' committees should be set up for each of these centres to advise it on the development of its programmes and activities. The Centre of Science and Technology Education being set up should also be developed as a resource centre for material development including software for classroom and telecast teaching and computer-based learning. Both radio and television should provide separate channels for educational programmes.
- iv) Greater emphasis would have to be given in the Seventh Plan to equip the universities and colleges with the minimum facilities required for the maintenance of a reasonable level of standard. The UGC should initiate steps to evolve appropriate norms for the provision of physical facilities required for different courses offered by universities and colleges and to provide those facilities in a phased manner. The State Governments should assume a greater responsibility for the development of the colleges specially those located in remote and backward areas.
- v) Greater attention should be paid to improve the quality and standard of post-graduate education. The number of students joining the post-graduate courses should be restricted by selection on the basis of a National Merit Examination. The UGC should evolve norms to determine the admission capacity of each post-graduate course. These norms should be evolved with reference to the availability of personnel, library facilities and equipment. It should be ensured that no admission is made beyond the admission capacity so established. The structural reforms in under-graduate education would necessitate a review of the contents of the post-graduate courses. The subject panels of the UGC should formulate guidelines for various courses taking into account the reforms in under-graduate education. Teachers engaged in post-graduate courses should be enabled to take study leave to do research with provision for monitoring and evaluating their performances at regular intervals. At post-graduate level also distance/open education programmes should get a place of pride. The proposed open university should undertake this task.

The research programmes in universities and colleges would have to be reviewed and oriented to make them more relevant and useful. Besides reviewing the value of fellowship, admission to the Ph.D. programmes should be regulated on the basis of admission test.

- vi) In order to strengthen post-graduate education and research, measures like sharing of facilities, and exchange of personnel should be implemented. The developed universities should play a special role in assisting those universities which are located in remote and backward areas in developing the latter's teaching and research capability. The programmes of Centres of Advanced Studies and Departments of special assistance of the UGC should be further strengthened to achieve these objectives.
- . vii) While the universities have a special role in promoting basic research and research in the frontier areas of knowledge, it is equally important that they should be actively involved in Applied Research, especially in thrust areas and emerging fields. Equipped as the universities are with a high level of infrastructure and expertise in several disciplines, they are ideally suited for major involvement in nationally useful projects and every effort should be made to utilise this potential as envisaged in the National Policy on Education, and institutions for research should, as far as possible, function within the fold of universities or in intimate association with them.
- viii) It is neither desirable nor feasible to equip every university with major research facilities especially in all advanced and sophisticated fields. Such facilities have, therefore, to be provided on a selective basis, as National or regional facilities which could be shared by a number of universities. The UGC has already a proposal to establish such common facilities in Scientific Documentation in Nuclear Science Research. Such common facilities in more areas should be major programme in the Seventh Plan, which will ensure better utilisation of available resources and eliminate the possibilities of duplication in efforts. The University Service and Instrumentation Centres, set up by the UGC in the previous plans, should be further strengthened with appropriate research component in their work and linking their efforts with research laboratories and institutions in their neighbourhood. Group research projects, especially in thrust areas, should be encouraged. The special programme initiated in the Sixth Plan to strengthen post-graduate education and research in science and technology through selective support should be continued and strengthened.
- ix) Training of teachers is one area in higher education which has not been given adequate attention in the past, except through organisation of seminars, summer institutes and conferences. The programme for re-organising under-graduate

education in the Seventh Plan will require development of new methodologies and techniques of teachings, learning and evaluation. The UGC should review the existing programmes of faculty improvement and re-formulate them as more effective teacher training programmes in the nature of pre-service, in-service, enrichment and professional improvement programmes, wherever necessary through institutionalised arrangements to be provided at special centres. The recommendations of the Teachers' Commission which are likely to be available shortly, should also be taken into account, while drawing up programmes of teacher's training for higher education in the Seventh Five Year Plan.

- x) To introduce reforms in universities and colleges, effective measures for de-centralisation of the administration and academic processes should be undertaken. The universities should encourage colleges to become autonomous so that the present stalemate in the implementation of the programme (only 20 colleges have so far become autonomous) is broken. Simultaneously regional or sub-regional centres should be set up by each university for a cluster of colleges with adequate powers for deciding the administrative and academic matters in respect of the colleges under their charge. Similarly, within each university, a greater measure of delegation of authority to centres and departments is urgently called for. These reforms in structures together with the seriousness in the re-organisation of under-graduate courses should be a necessary condition for all development grants to all universities in the Seventh Plan.
- xi) To develop beneficial linkages among education, employment and economic development, some statutory mechanism should be established in each university with representation from the university, community and various development sectors. For this, a Planning Board may be established in each university as a statutory authority, to advise the development of the university, to review educational programmes, to develop new teaching-learning processes and initiate programmes of innovation involving participation in developmental activities. Development Sectors should earmark a part of their allocations for manpower development and make it available to the educational agencies.
- xii) Universities, by and large, are not in a position to respond to change partly, owing to the inflexibility of the system and its structures, which inhibit all innovation. Since the present models and structures of the university system have failed to deliver the goods, it is desirable to re-organise the university system and its management so that they could respond positively to the national development objectives. This would require very substantial changes in the functional processes, structures, policies and management pattern followed by the universities, involving inter-alia changes in legislation. The UGC and the Central Government

should initiate measures for the development of appropriate management systems for the University system.

- xiii) It is also necessary to organise training courses for the management personnel working in universities and colleges. All officers dealing with the implementation of the reform programmes, including Vice-Chancellors and Registrars of the universities and Principals of colleges, need orientation training to implement the reforms needed for improving higher education and linking the same with national needs.
- xiv) The proposal to delink degrees from jobs to remedy the problems of increasing pressure for admission to institutions of higher education and acquisition of degrees, should be seriously pursued in the Seventh Plan. Till this is done efforts should be initiated to develop a National Testing Service and the establishment of an agency for accreditation of university degrees. These steps could facilitate the easy implementation of the proposal of delinking university degrees from a large number of jobs.
- xv) Significant work has been done by the Council of Social Sciences Research, Indian Council for Historical Research and the Indian Council for Philosophical Research. These need strengthening and further development for producing good social scientists and to provide research studies in the field of social sciences and humanities.
- xvi) To provide for significant opportunities for innovation in higher education, especially in designing and organising the application-oriented component, community involvement should be visualised and planned in this experiment. Besides Government agencies, there are a number of institutions, organisations and voluntary agencies engaged in the field of higher education. They should be encouraged and assisted in the overall development of higher education and also research in oriental learning.
- xvii) For introducing the reforms in university systems and implementing the various programmes it is imperative that greater attention is given to promotion of corporate life in the universities and colleges. Teachers' houses, students' hostels, facilities for games, sports, cultural activities, hobby centres etc. should form an integral part of the development of all institutions.

Financial Outlays

It would not be possible to provide for all the inadequacies in the universities and colleges, which have accumulated from the past plans, in the Seventh Plan. However, in the interest of maintaining a good standard of higher education in the country and from the point of view of linking this sector directly with development sectors, it is necessary that substantial outlay should be provided for this sector

in the Seventh Plan, mainly for strengthening the infrastructure of the universities and for introducing the major reforms of restructuring of under-graduate courses, quality improvements programmes at post-graduate courses and application-oriented research programmes. For this, the Working Group calculated an outlay of the order of Rs.1649 crores for the programmes recommended by them. However on working out the cost of various programmes on the basis of some existing norms and unit costs, the total outlay for this sector works out to be around Rs.1536 crores, the scheme-wise and programme-wise details of which are given in the Annexure. These estimated requirements are in addition to the spill over of Rs.188.00 crores in respect of programmes already approved in the Sixth Plan.

The Working Group on higher education reviewed the fee-structure in colleges and universities and has come to the conclusion that it needs an upward revision particularly because of rise in prices and increase in the costs. It has recommended that 25% of the total expenditure on higher education (on Revenue Account) should be contributed by students in the form of fees. Hence, the students enrolled in the institutions would be contributing atleast a marginal share towards the development needs of their institutions.

ESTIMATED OUTLAY FOR HIGHER EDUCATION FOR THE SEVENTH PLAN

(Rs. in Lakhs)

Continuing Scheme

1. Expansion and Development

(A) Undergraduate Education

i) Teaching cost for 7 lakhs out of 10 lakhs additional children projected for the Seventh Plan period @Rs.1200 per student (on the basis of average salary of Rs.2000 per teacher and 1:20 teacher-pupil ratio) (1200 x 10 lakhs x 3)	25000
ii) Non-teaching cost @ 20 per cent of teaching cost	5000
iii) Quality improvement @ 20 per cent of teaching cost	5000
iv) Restructuring of Under-graduate Courses @ Rs.1 lakh per college for 500 colleges	5000
TOTAL(A)	40000

(B) Post-graduate Courses

i) Teaching cost for 1 lakh additional students (10% of total additional enrolment) @Rs.2400 per student (double the cost per student of undergraduate courses) (2400 x 1 lakh x 3)	
a) Colleges	5000
b) Universities	2500
	7500
ii) Non-teaching cost @ 20 per cent of teaching cost	1500
iii) Quality Improvement @ 20 per cent of teaching cost	1500
iv) Special Programmes for Strengthening Science and Technology Education	5000
TOTAL (B)	15500

(C) Development of Universities

(Infrastructure and Research @Rs. 5 crores for each of the targeted 50 universities)	25000
TOTAL (C)	25000

(D) Open University System/Correspondence Courses

- i) Teaching cost for 3 lakhs additional children out of 10 lakhs projected for Seventh Plan @ 1/3rd of the cost of formal system of Under-graduate courses (i.e. Rs. 800 per student) 2500
- ii) Non-teaching cost of preparation of material and other recurring cost of technology (INSAT/Distance Learning) 2500

TOTAL (D) 5000

(E) Programmes of Research Support

- @ double of the provision for the Sixth Plan 4000

TOTAL (E) 4000

- (F) Common Research Facilities (Nuclear Centres and other 2 such institutions, Leather Technology etc.) 5000

- (G) Research Groups in Universities (For common use of research facilities) - (Ad-hoc) 2500

- (H) Fellowships and Scholarships for 5% of the projected additional 10 lakhs enrolment @ Rs.600/- per month (50000 x 7200) including provision for enhancement of fellowships 2500@

- (I) Quality Improvement Programme (Centres for Advance Studies, Service Improvement Programmes and other Quality Programmes) (Twice of the provision in the Sixth Plan) 10000

- (J) Establishment of Science and Technology Education Centre 1000*

(K) Orientation Training of Teachers

- (5% of total teachers @Rs.2000 per teacher) including special training programmes for serving teachers 2000

(L) Research Councils and Coordinating Agencies

- (ICSSR, ICAR, ICHR etc.) on the basis of 30% increase in the current level expenditure 2500

- (M) Voluntary Agencies and Institutions (Institutions of Oriental Learning and other studies of Tradition 500

TOTAL(A,B,C,D,E,F,G,H,I,J,K,L,M) 115500

(Rs. in Lakhs)

New Schemes

i) Modernisation of Equipment (Replacement of old equipment @Rs. 1 crore for 50 universities which are more than 20 years old)	5000
ii) National University (ad-hoc)	1000
iii) Central Agency for Foundation Courses (Material preparation for awareness and rational)(Ad-hoc)	500
iv) National Merit Examination (for admission/ fellowships and other similar examination)	400
v) Institute for Research in Higher Education (management Models and Studies) including programmes for strengthening UGC and Ministry of Education	1200
vi) Facilities for promotion of corporate life (teachers quarters, students hostels, centres for games and cultural activities, playgrounds for Sports) Lump sum provision	20000

28100

Central University (Full infrastructure, for JNU, NEHU, Hyderabad Universities @Rs.20 crores for university) and Rs.30 crores for remaining universities and Rs. 10 crores for new universities.

10000

GRAND TOTAL

Continuing Schemes	115500
New Schemes	28100
Central Universities	10000

Rs. 153600

Spillover Rs. 18800

Total Rs. 172400

@ This does not include an additional provision of Rs.25.00 crores suggested for Scholarships and Fellowships.

* A further sum of Rs. 15.00 crores has also been proposed for Science and Technology Education under Technical Education.

CHAPTER VI

TECHNICAL EDUCATION

Introduction

The technical education system is designed to meet the technological needs of economy, both on short-term and long-term basis, particularly to make available appropriately qualified technical manpower needed by the economy. The development of technical education is, therefore, regarded as an area of high priority in economic planning. During the Sixth Plan the major emphasis has been, inter alia, on consolidation and optimum utilisation of existing facilities, strengthening of infrastructure, creation of new facilities for educational training in areas of emerging technologies and improvement of quality and standards of technical education.

2. As a result of the efforts made so far, technical education system has grown in size and potential so much so that it would be able to meet most of the technical manpower requirement of the country in the conventional areas be it for production, maintenance, technology or development of technological upgradation. However, there are emerging areas where there are critical shortages of technical manpower and necessary efforts will have to be made to meet the challenges in these specified fields. A long lead time required in technical education and long term profiles of national science and technology would have to be duly kept in view in this regard. necessary emphasis will have also to be laid to the improvement of quality and standards of engineering graduates and diploma holders trained in our technical institutions. In this context, attention will also have to be paid to experimental and innovative exercises in the form of specialised/model institutes/projects. In our efforts to ensure the optimum utilisation of the infrastructure available in technical education institutions, attention will also have to be paid to make use of it as service facility for other development departments/sectors.

Approach to the Seventh Plan

3. In view of the above, it is recommended that the main emphasis during the Seventh Plan may be laid on following aspects.

- i) Consolidation of infrastructure and facilities already created.
- ii) Optimum utilisation of the existing facilities to ensure higher levels of productivity and cost-effectiveness.
- iii) Identification of critical areas and creation of infrastructure in new areas of emerging technology vital for future development and provision of necessary facilities for education and training in those fields.

- iv) Improvement of quality and standards of technical education.
- v) Removal of obsolescence.
- vi) Modernisation of engineering laboratories and workshops in the technical institutions.
- vii) Effective management of the overall system of technical education with a view to getting optimum return from the inputs made under different schemes.
- viii) Innovative measures and opportunities to improve existing facilities to provide low cost alternatives to achieve various goals and objectives laid down in the Plan.
- ix) Institutional linkages between technical education and development sectors.
- x) Contribution in the national efforts to develop and apply science and technology as an instrument of socio-economic progress.

Strategies

4. The above approach seeks to ensure completion of the development schemes, started in the Sixth Plan and earlier Plans and to institute the additional new schemes, wherever necessary, to meet the challenges posed by rapid scientific and technological advances and urgent national requirements in the field of technical education. Further development of technical education will continue to be planned in relation to present and future requirements of engineering manpower to implement the various development projects and programmes. National perspectives, technology policy, social relevance and cooperative partnership between technical education institutions/agencies and industry/user agencies will remain the guiding principles in this sector. Coordinated planning and development of facilities for technical education in different specialisations and branches of engineering and technology will help optimise utilisation of the infrastructure and the network of the institutes of technology, engineering colleges and polytechnics. In the above context, it is necessary that the schemes started in the Sixth Plan for creation of facilities in new areas of emerging technologies, modernisation of workshop, strengthening of facilities in areas of weakness, establishing institutional linkages through internal network of laboratories in engineering colleges and for the establishment of a Technical Manpower Information System are continued during the Seventh Plan period. In order to make the system sensitive to play a leading role in the development of technology, new schemes which are aimed at improvement of quality and standards of technical education will also have to be implemented in the Seventh Plan period.

Thrust Areas

5. There are a few areas which are highly important and significant to tone up and revitalise the system of technical education in the country. These shall be the major thrust areas during the Seventh Plan period and would include (a) Improvement of Polytechnic Education, (b) Removal of Obsolescence, (c) Computerisation, (d) Women's Education, (e) Application and Extension of Science and Technology to Rural Development, (f) Continuing Education, (g) Interaction between Technical Institutions and Industry, and (h) Removal of Regional Imbalances. The urgent need for giving major attention to these thrust areas would be highlighted by the relevant facts summarised below:

(a) Improvement of Polytechnic Education

6. In spite of a number of useful and valuable recommendations made by the Special Committee on Reorganisation of Polytechnic Education, the state of affairs in polytechnic education continues to be far from satisfactory. In the promotion and improvement of engineering education, at the degree and postgraduate levels, the Central Government had played a vital role. 5 Indian Institutes of Technology were set up as Institutes of national importance to provide facilities for higher education and research, 15 Regional Engineering Colleges were set up as joint enterprise of the Central and the State Governments, 3 All India Institutes of Management were set up to provide facilities for higher education in the field of Management. A number of Central institutes to provide education and training at higher levels in specialised fields like industrial engineering were also set up. However, at the polytechnical level no such measures were taken by the Central Government in the past except establishing 4 Technical Teachers' Training Institutes to train polytechnic teachers.

7. In order, therefore, to take necessary steps to improve the situation, all possible emphasis will have to be laid on the polytechnic education and the Central Government will have to involve itself in a big way. Besides general improvement of polytechnic education, model polytechnics and residential girls' polytechnics may be set up by the Central Government to serve as pace-setting institutions/centres.

(b) Removal of Obsolescence

8. The problem regarding removal of obsolescence has assumed serious proportions and it requires urgent attention during the Seventh Plan period. The removal of obsolescence pertains not only to equipment but also human resources, instructional materials, textbooks, teaching methods etc. Rapid advances in science and technology make it imperative that the courses of study are modernised in terms of course contents and teaching techniques. As such the need is not only to replace the old and unserviceable equipment but also to equip the laboratories with modern instruments and machines to meet the requirements of the latest scientific and technological advancements

and the curricular changes introduced in the light of evolving trends of technology. In regard to human resources, not only teachers of high quality will have to be attracted towards teaching profession but arrangements will have to be made for their constant and continuous training and retraining to meet the challenges of the latest technological advancements. Adequate attention has not been paid to this important aspect in the earlier Plans and as such it has become highly important and significant to lay the maximum emphasis on the speedy removal of obsolescence in our engineering colleges and polytechnics.

(c) Computerisation

9. Computers have become most important means for industrial and technological advancement. In the absence of adequate computing facilities, it is not possible for our institutes of engineering and technology education to meet the challenges of modern times. Whereas in the developed countries, computers have reached even the individual homes, it is a matter of serious concern that in India we have not been able to provide computers even to our technical institutions. A scheme for providing computers to the engineering colleges which remain without this facility till the end of the Sixth Plan period and to cover all the polytechnics engaged in training middle level technicians, will be provided during the Seventh Plan period.

(d) Women's Education

10. In pursuance of the general policy, more and more facilities are being provided for technical education of women. Deliberate efforts shall, therefore, be made to provide appropriate facilities for girl candidates to take technical courses. In this context, it is necessary that during the Seventh Five Year Plan facilities for technical education for women are expanded by establishing new women's polytechnics including residential polytechnics for women.

(e) Application of Science and Technology to Rural Development

11. The whole effort of any type of education as that of technical education system is for the benefit of society at large. The technical education should appropriately respond to the social needs of a large percentage of the population residing in the far-flung rural areas where the existing facilities have not reached at all. For this population our technical education system has to help improve their standards and life style. In this context it is necessary that a scheme of Community Polytechnics already initiated during the Sixth Five Year Plan is expanded during the Seventh Plan period and more and more polytechnics should be converted into such institutions and inducted for this important task. To make the educational efforts of these institutions relevant to the live situations, selected community polytechnics should be encouraged to undertake experimental pilot projects for the application of science and technology to total integrated rural development and necessary support may be provided to

them for the purpose. These experimental projects would help in creation of new knowledge and development of new approaches and strategies which in turn are likely to yield a high dividend in the application of science and technology to the rural development in an adequate manner. To meet the challenge of this massive task, special centres of appropriate technology and rural development should also be set up during the Seventh Plan. The above schemes would also meet the growing challenge of upgrading the skills of the people in the far-flung rural areas to enable them to avail of maximum benefit from the application of science and technology for the solution of the social problems. Thus this is bound to accelerate the process of total development of the rural areas.

(f) Continuing Education

12. Training of students no doubt should be the basic responsibility of the technical institutions these institutions, however, have almost an equal responsibility to retrain and update the knowledge of technical personnel working in the different sectors concerned with the economic development of the country. With over 4.5 lakh engineering graduates and nearly 7 lakh diploma holders estimated to be likely in the stock of technical manpower by 1989-90, the task of updating and upgrading their knowledge and skills to contribute to higher productivity in the country assumes gigantic dimensions. Opportunities will also have to be provided for advancements through facilities for higher education to those already engaged in the professions. Also with major thrust in vocationalisation, continuing education shall be the main answer for providing access to higher technical education for a large number of boys and girls entering life after completing vocational courses. In spite of its relevance and importance, adequate attention has not been paid to the continuing education during the earlier Plans. The formal system by itself would not be able to meet the growing demand for opportunities for advancement and also for facilities for upgrading their knowledge and skills to those already engaged in the profession. To meet all these varying requirements, different strategies and approaches will have to be adopted for continuing education to reach the large number of technical personnel through part-time/full-time, distant learning correspondence courses etc. A definite scheme covering all these approaches will therefore, have to be instituted during the Seventh Five Year Plan.

(g) Interaction between technical institutions and industry

13. The need for closer interaction between technical institutions and industry has been emphasized time and again at all platforms. It is of paramount importance that the technical institutions and industry should act as partners in the development of an engineer or a technician and each must play the role that is best fitted to accomplish. The need of such close interaction and collaboration has become all the more urgent and important in view of the challenges posed by the latest situations in the field of technical education which require greater attention towards a number of important

problems. The areas of joint efforts include improvement of quality and standards of technical education, development of facilities on appropriate lines, diversification of courses to meet the changing requirements of industry, development of faculty of technical institutions by way of training and retraining of teachers, development of curriculum to make the courses more live dynamic and responsive to the needs of evolving trends of technology, organisation of sandwich courses to have a breakthrough in new directions with reference to the felt needs. In spite of series of recommendations having been made in this regard by all concerned, the problem of closer interaction and collaboration between technical institutions in different aspects still continues to pose a major challenge. It is, therefore, urgent that deliberate efforts be made in this important area during the Seventh Plan period and specific schemes instituted to meet this challenge, in an adequate and effective manner.

(h) Removal of Regional Imbalances

14. The development of technical education in the past three decades has, no doubt, been phenomenal but uneven. This has been due to a number of factors including initiative taken and resource mobilisation by the different States. The provision of adequate facilities for technical education and training has a direct bearing on the development of a particular State/Territory. It is, therefore, highly desirable that regional imbalances in regard to the facilities for technical education should be removed as early as possible. The Estimates Committee of the Sixth Lok Sabha in its Ninth Report on Higher Technical Education also made a serious observation on these regional imbalances and recommended that the Central Government should take positive steps to provide technical education facilities in those regions/States where they are deficient at present so as to bring up at par with the seat population ratio in regions/States of the country where these are disproportionate, in the interest of equitable development of the country as a whole.

INTERNATIONAL CENTRE FOR SCIENCE AND TECHNOLOGY EDUCATION IN INDIA

15. In line with the above objectives and in pursuance of the United Nations Conference on Science and Technology for Development held in Vienna in August 1979 and the subsequent International Conference on Science and Technology Education and National Development held in Paris in December 1981, on the advice of the Scientific Advisory Committee of the Cabinet at its 5th meeting, a decision was taken to set up an International Centre for Science and Technology Education in India more or less on the pattern of the International Centre for Theoretical Physics, Trieste, in Italy. The Centre is to function as a catalytic agent for the improvement of science and technology education in India and other developing countries by using/collaborating with other existing institutions in India as a network. The Ministry of Education will be the focal point for coordinating the activities of this Centre which will be set up as an autonomous body with a small core technical staff and provide:

- a) a resource centre of books, journals, conference reports, materials developed in science and technology education all over the world;
- b) a system of exchanging and disseminating information;
- c) facilities for individuals to undertake research and development work; and
- d) other related activities.

16. The core structure of this centre will be fully national and expertise from UNESCO and other international agencies will be requested for as and when needed for specific purposes. An affiliating system to associate various institutions in related areas will be developed in due course.

17. It is expected that the academic programme of the Centre will be designed in consultation with suitable advisory bodies and to develop programmes in new areas such as computer aided instruction, self-instructional techniques, use of emerging educational technology, use of computers for evaluation etc. The materials developed in the country will be exposed to target audiences for assessment and evaluation before being used for the broader objectives. It is expected that the total cost for the Centre would be around Rs.8 crores spread over 3 years and the recurring expenditure annually would be of the order of Rs.1.5 crores.

18. The above schemes should be considered vital for achieving the basic priorities and objectives. Besides the above thrust areas, there are a number of other areas which are also important for the improvement of quality and standards of technical education. All other New Schemes proposed to be instituted in the Seventh Plan would also be essential for maintaining the tempo of development in the Seventh Plan and subsequent Plans. Adequate attention will have to be paid during the Seventh Plan period to the following areas: (1) Development of learning resource centres, (2) Organised technical extension services by faculty and students to identify, develop and apply appropriate technology, (3) Evaluation of technical institutions/programmes and projects, (4) Students hostels, (5) Staff quarters, (6) Expansion, (7) Engineering colleges/polytechnics as joint enterprise of Central Government and industry (8) Assistance to professional bodies, (9) New programmes of QIP, and (10) New schemes of apprenticeship training.

Programmes and Targets

19. In some of the schemes it may be difficult to indicate the specific targets at this stage. In other schemes the targets envisaged are as under:

- (i) Establishment of two new Regional Engineering Colleges - one in Himachal Pradesh and the other in Punjab.

- (ii) Establishment of a new Institute of Management in Lucknow.
- (iii) Modernisation of equipment and facilities in 110 polytechnics.
- (iv) Modernisation of equipment in all the engineering colleges.
- (v) Toning up of all polytechnics by providing instructional material, revision of staff structure, staff training etc.
- (vi) Establishment of one Model Polytechnic in each of the major States.
- (vii) Establishment of Girls' Residential Polytechnics.
- (viii) Establishment of 20 new Girls' polytechnics.
- (ix) Establishment of training facilities for development of manpower in electronics, television and computer sciences in 80 diploma level institutions.
- (x) Removal of obsolescence of equipment in all engineering colleges and polytechnics.
- (xi) Removal of obsolescence of human resources in all engineering colleges and polytechnics.
- (xii) Provision of computer facilities in all engineering colleges and polytechnics.
- (xiii) Establishment of Learning Resource Centres - at least two in each State.
- (xiv) Establishment of at least three new centres for development of rural technology and its transfer into rural life.
- (xv) Twenty pilot projects for application of Science and Technology for total rural development.
- (xvi) Staff quarters for 7000 teachers.
- (xvii) Establishment of 200 student hostels for boys and girls.

Financial Provision

20. The financial provisions for the various schemes to be continued from the previous Five Year Plans and to be instituted as New Plan Schemes during the Seventh Plan period are given below:

(Rs. in lakhs)

Sl.	Name of the Scheme	Central Sector			State Sector
		Sixth Plan Outlay	Sixth Plan Expenditure	Proposed Outlay for Seventh Plan	Proposed Outlay for Seventh Plan
1	2	3	4	5	6
I. CONTINUING SCHEME					
	(A) From previous plans				
	1. Quality Improvement Programme				
	a) Direct Central Assistance	6,00	7,65	8,00	--
	b) Hostels for Teachers Trainees	--	--	2,00	--
	c) Community Polytechnics	2,00	2,00	5,00	5,00
	2. Regional Engineering Colleges (including New colleges to be set up and additional expenditure for entire funding from Central Government)	11,00	13,00	60,00	5,00
	3. Indian Institutes of Technology	32,50	38,66	50,00	--
	4. Indian Institutes of Management (including new institutions)	6,00	11,00	25,00	--
	5. Development of Post Graduate Courses	3,60	2,86	8,00	--
	6. Central Institutes				
	a) TITIs)				(6,00
	b) NITIE)				(1,50
	c) SPA)				(4,00
	d) NIFT)	5,40	6,90	13,00	(1,50
	7. Apprenticeship Training	4,00	1,96	5,00	--
	8. Management Education	1,00	67	2,00	1,00
	9. U.G.C.	27,75	28,57	60,00	1,00
	TOTAL	99,25	113,27	238,00	12,00

1	2	3	4	5	6
(B) From Sixth Plan					
1. Creation of Infra-structure in new areas of emerging technologies	22,00	}		40,00	20,00
2. Strengthening of facilities in areas of weakness	18,00		42,06	40,00	10,00
3. Modernisation of Laboratories and Workshops (for Engineering Colleges and Technological Institutions)	10,00			50,00	20,00
4. Institutional Network Scheme	4,00		4,95	10,00	10,00
5. T.C.D.C. Programme					
a) Educational Consultants	40	}	43		10,00
b) Other Programmes	-			1,00	-
6. National Manpower Information System	1,00		82	2,00	1,00
7. Advanced Technician Courses	1,00		1,09	3,00	1,00
8. New schemes for Apprenticeship	1,00		1,00	5,00	-
*9. Technical Institutions Society Interaction	3,00		*	5,00	1,00
*10. Monitoring and Evaluation	10		*	1,00	1,00
11. Other schemes which could not come up in any way	8,25		-	-	-
TOTAL	68,75		50,35	158,00	64,00

* Schemes are being processed for approval and expenditure likely to be incurred in the Sixth Plan scheme shall be only marginal. Accordingly increased provision has been made in the Seventh Plan.

1	2	3	4	5	6
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II. NEW PLAN SCHEMES

A. Thrust Areas

1. Improvement of Polytechnics/ Polytechnic Education

a) General Improvement and toning up including modernisation	-	-	75,00	50,00
b) Model Polytechnics	-	-	80,00	20,00
c) Girl's Residential Polytechnics	-	-	50,00	-
d) Technical Polytechnics and Institutes for Women	-	-	-	50,00
e) Training of Manpower in Electronics, TV and Computer Science	-	-	20,00	-

2. Removal of Obsolescence

a) Obsolescence of Equipment	-	-	100,00	50,00
i) Engg. College			50,00	
ii) Polytechnics			50,00	
b) Obsolescence of Human Resources and Develop- ing Human Resources in New Areas	-	-	3,00	2,00
c) Educational Technology Curriculum and Teaching Material	-	-	10,00	10,00

3. Continuing Education (Infrastructure, Hostels Staff and Regional Coordinators)

-	-	12,00	10,00
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4. Computer Facilities (including software and hardware)

-	-	100,00	-
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1	2	3	4	5	6
5.	Interaction between Technical Institutions and Industry				
a)	Strengthening & Expanding of industrial oriented and sandwich courses				
b)	Exchange of personnel between technical institutions and industry	-	-	10,00	5,00
c)	Strengthening of Consultancy Centres				
d)	Adoption of Technical Institutions				
e)	Promotion of Industrial research and development work by technical institutions				
6.	Removal of Regional Imbalances				
a)	New Technical Institutions both at the degree and diploma level (under state sector only)				
b)	Aid to Technical Institutes reserving seats for students of backward areas/regions	-	-	50,00	50,00
c)	Hostel facilities for students coming from backward regions/areas				
d)	Hostel facilities for students from rural/backward areas within the same states				
B.	Other Areas of Urgent Need and Importance				
7.	Learning Resource Centres	-	-	5,00	5,00

1	2	3	4	5	6
8. Special Schemes for Rural/ Appropriate Technology					
a)	Institutions/Centres for application of technology to Rural Development	) -))))	-	40,00 (20,00 20,00)	20,00 (10,00 10,00)
b)	Experimental Pilot Projects for application of science and techno- logy to total Rural Development	)))))			
9. Improvement Management System of Technical Education					
	Strengthening of Planning organising and coordina- ting machinery at the centre, state and insti- tutional level		-	10,00	5,00
10. Evaluation of Technical Institutions, Programmes and Projects					
a)	National Agency for Accreditation	))			
b)	Strengthening for purpose of evaluation and follow up of state Directorates, Boards of Apprenticeship training Regional Offices and Secretariat of All India Council for Technical Education	))) -))))))	-	10,00 (5,00 (5,00)	15,00 (15,00)
11. Students Hostel					
a)	for boys & girls	-	-	-	30,00
b)	for girls	-	-	-	20,00
12. Staff Quarters					
		-	-	60,00*	100,00

13. Expansion				
a) To complete development schemes continuing from previous plans	-	-	-	100,00
b) New expansion	-	-	-	150,00
14. Engineering Colleges/ Polytechnics as joint enterprise of Central Government & Industry	-	-	10,00	-
15. Assistance to Professional Bodies	-	-	5,00	-
16. New Programme for QIP				
a) Faculty and curriculum development including pay scales and service benefits for teachers	)	)	)	)
b) Innovations, experiments for optimisation and cost effectiveness	)	)	20,00	10,00
c) Higher degree/qualifications for polytechnic teachers	)	)	)	)
d) QIP Centres at individual institutes	)	)	)	)
17. New Schemes for apprenticeship training	-	-	10,00	-
TOTAL	-	-	680,00	708,00
G R A N D T O T A L	168,00	163,62	1076,00	784,00

* Loan scheme for Central Insitutes

The above amount shall be the minimum requirements if the backlog is to be cleared, the schemes instituted in the Sixth Plan period are to be consolidated and the major challenges faced by Technical Education system today have to be met adequately and effectively.

CHAPTER - VII

ADULT EDUCATION PROGRAMME

The goals of our development are growth with social justice, modernisation with self-reliance, transfer of technology to rural areas with creation of scientific temper among the masses and building up of faith in the one's own ability to change rather than be dependent on fate. In this context, Adult Education is seen as an instrument of galvanizing and mobilising the people; arousing community consciousness and community participation for bringing about social change. An overview of the situation reveals that though there has been the realisation for several decades, that adult literacy per se is not enough and it has to be an integral part of the developmental process, this realisation had yet to materialise in activities and programmes in an adequate measure.

2. During the Sixth Five Year Plan, adult education was included as part of the Minimum Needs Programmes and a goal of reaching 100% literacy by 1990 in the age group 15-35 was visualised and further reaffirmed in the New 20-Point Programme accepted by the Nation. The mid-term appraisal of the Sixth Plan revealed that a balanced strategy of educational planning with the long-range goal of making available diverse networks of facilities and programmes for education, combining formal and non-formal modes of learning to enable all citizens to acquire literacy, numeracy, computational skills, basic understanding of the surrounding world and functional skills of relevance in daily life and to local environment were being attempted. It also emphasised that planning effort should shift from provision of inputs and expansion of facilities in general terms, to results to be achieved and tasks to be performed with specific reference to target groups of population particularly the socially-disadvantaged. While no physical targets were laid down, Adult Education Programme was to be developed on a large scale for the age-group 15 to 35 to combat the problem of illiteracy. The programme was guided by the following parameters during the Sixth Plan:

- Coverage of the districts having literacy rate below the national average;
- accord priority to the women, scheduled castes, scheduled tribes, migrant labourers and other weaker sections of the society, to improve their literacy position;
- enlist larger participation of students;
- provide grants-in-aid to voluntary organisations working in the field of adult education and which have no communal leanings;
- strengthen the post-literacy programme to avoid lapses into illiteracy of the neo-literates; and
- utilise the potential of electronic and folk media for motivational purposes.

Achievements during the Sixth Plan period, taking into account the overall enrolments as the basis, are not likely to exceed 230 lakhs which leaves a balance of nearly 870 lakhs persons out of the entire estimated illiterate population of 1100 lakhs in 15-35 age group to be covered during the Seventh Five Year Plan.

3. An appraisal of the implementation of the programme during the Sixth Plan indicated considerable progress, yet there are certain areas which require special attention. There is need for substantial stepping up of the level of performance under the Adult Education programme which requires substantial increase in the coverage as well as improvement in the quality of the programme. Special efforts are needed to strengthen post-literacy follow-up, ensure greater involvement of women, establish linkages with developmental agencies, promote larger use of mass media for literacy and involve students and voluntary agencies on a more extensive scale. The necessity for involving the community in organisation of literacy programme and mobilisation of community resources to meet the requirements of the expanded programme require special emphasis.

New design for Adult Education and Strategy for implementation

4. To achieve the objective of removal of illiteracy in the age-group 15-35 by 1990 a policy decision relating to the new design for adult education, based on the recommendations made in the Report of the Working Group would be called for. Some of the major recommendations made in the report of the Working Group are enumerated below.

- (i) Adult Education should be viewed as an integral component in all development programmes not merely for propagation of literacy and numeracy as ends in themselves but with a view to improving the viability of the relevant development programmes and increasing their functional relevance.
- (ii) Improvement of levels of literacy can not and should not be viewed as the concern of the Ministry of Education only. All development Ministries/Departments should be assisted to promote literacy through appropriate development schemes. The development Ministries/Departments may also be required to earmark a certain percentage of their budget for adult education which should be utilised primarily to raise the levels of literacy of their beneficiaries and provide opportunities to them for acquiring new skills.
- (iii) All major employers in organised and semi-organised sectors should be under an obligation to promote literacy and functional education for their employees at or near the places of their work. Suitable legislation may be enacted if considered necessary for the purpose to make it an obligation under law on the part of the employers to provide to their workers opportunities to acquire literacy and

upgrade their skills for which at least one hour should be set apart without any corresponding loss of wages.

- (iv) All employers in the private sector should be required to earmark adequate funds for promoting literacy activities and upgradation of skills of illiterate employees in their respective organisations.
- (v) With a view to secure wider involvement of youth in the national effort to eradicate illiteracy it should be made obligatory for students under the NSS and non-student youth under NYKs to participate in the Adult Education programme either for conducting adult education classes or for providing motivation or assisting post-literacy follow-up activities.
- (vi) As women constitute more than 63 per cent of the illiterate population in the age-group 15-35, industrial licencing rules and regulations for contractors should be amended to provide for some obligation on the part of the employers to ensure that all illiterate women workers employed by them particularly on construction work are made literate, if need be, by setting apart one additional hour where literacy and numeracy skills could be imparted.
- (vii) All development programmes in the Government sector should be required to earmark suitable funds in their budget for imparting literacy to women workers and improve the level of their skills.
- (viii) In addition to the establishment of meaningful linkages between adult education programmes and other development programmes which is indeed the sine qua non for successful implementation of adult education programmes, all relevant programmes within the Education Sector itself, promoting adult education, early school education, non-formal education should be so integrated that the illiterate population in the age group 9-14 and 15-35 could take fullest advantage of programmes of adult and non-formal education. Similarly premises of existing educational institutions in the formal sector of education, could be utilised to promote literacy activities during out-of-school hours.

5. The basic issues as may be relevant to the implementation strategy in respect of adult education during the Seventh Plan, relate to motivation of adult illiterates and organisation of adult education programmes on a mass scale. As regards motivation the Working Group has suggested the following strategies.

- a) the educational component in all developmental activities like IRDP, NREP, etc. should be identified and adequately strengthened, and the learning material for illiterates and neo-literates could be suitably designed taking into account, the needs of the specific learning groups.

- b) with a view to provide need-based literacy for different categories of learners, literacy with emphasis on development of appropriate skills and functional education shall be an element in all development programmes for workers both in organised and unorganised sectors.
- c) in the adult education programmes to be implemented under RFLP, SAEF, voluntary organisations, universities etc., short duration courses for upgradation of skills should be provided and participation of learners through group motivation needs to be ensured.

6. As regards organisation of adult education programmes on a mass scale, in addition to substantial expansion under existing schemes of RFLP, SAEF, assistance to voluntary organisations, NSS and NYKs, efforts will have to be supplemented by similar programmes to be taken up through other organisations and agencies namely, industries, establishments, mines, factories, etc. Keeping in view the national commitment to achieve eradication of illiteracy by 1990, each department/organisation should be required to identify the number of illiterate workers in their organisations and should be assigned targets to promote eradication of illiteracy in a phased manner to be achieved by 1990. To give the programme the momentum of a mass movement, plans for eradication of illiteracy should be formulated at the district level, block level and village level. Micro level planning should provide for community participation in all literacy programmes from village level upwards to lend effective support to the national programme for removal of illiteracy and create a climate for literacy in the country.

7. To translate the new design as outlined above, into a realistic framework comprising multi-pronged attack on illiteracy and multi-level strategies, the following measures have been promoted for implementation of the Adult Education Programme during the next five year period i.e. 1985-90.

- a) Support of all the sections of community will be obtained in implementing the programme specially at the local level by creating village level committees or area level committees. The local leaders would be involved in actual management of the adult education centres and they would also be involved in supervising the functioning of the programme. The institutions like Panchayats, political parties and other local self-government bodies would be encouraged to take up the programme by provision of technical support in the form of materials and training of their workers. Before starting the programme, pre-operational campaigns would be organised to create a favourable climate for the programme and raise the awareness of the local people about the advantages from it.
- b) As mentioned earlier linkages with the development departments and other agencies will be strengthened by identifying those schemes where literacy can be an important input and they will be persuaded to take up programmes of adult education for their illiterate beneficiaries. They will also be expected to indicate

the targets of illiterate employees which they would cover each year through their own literacy/adult education programmes. Activitization of coordination committees having the representatives of development departments and adult education people would be done so that the programme gets the needed direction. The developmental agencies will be assisted in the training programmes organised by them so that the component of adult education also is covered and the trainees are acquainted with the techniques and methods of promotion of adult literacy. Appropriate measures will be taken to see that there is greater obligation on the part of the employers to provide education/literacy to their illiterate employees and that time so spent by them is accounted for as duty period. Further agencies like Central Board of Workers Education would be expected to take up programme on a bigger scale for imparting literacy to the workers in the organised sector. Within the education system also positive linkages will be developed with the formal system existing facilities of school buildings and other facilities would be utilised for the purpose.

- c) The programme will be directed to bridge the disparities in literacy rates among women, SCs and STs, and for this purpose a specific district plan would be necessary to be prepared indicating village-wise information of number of illiterate women, SCs and STs population which will have to be covered through the programme. In the preparation of the district plan, identification of agencies which could take up the programme in the respective areas would also be indicated. A special legislation would be necessary to be introduced to safeguard the educational rights of the illiterates employed in industries so that they could be provided education without losing their wages and getting this benefit at the place of work and during the duty hours. Similarly the industrial licensing rules and regulations for contractors will be appropriately amended to lay down the duty of the employer to see that all women workers employed by them are made literate and they are not at financial loss for attending the literacy centres. Other Ministries and Departments having schemes for rural development, employment, training etc. like the IRDP, NREDF, DWCRA, TRYSEM, ICDS would be expected to similarly organise literacy programmes for their women beneficiaries and they would be expected to earmark some funds in their budget for imparting literacy to women. Influential women in the areas where adult education centres are to be organised for women will be identified and given training so that they could bring their influence in increasing women's participation in the programme. At the State level a special cell is proposed to be created to monitor the progress of implementation of literacy programmes for women. This cell will also be responsible for coordinating the activities of planning the programme for women, ensuring relevant and needbased learning materials for use at the adult education centres after getting them prepared by the State Resource Centres and other similar agencies and also for ensuring post-literacy activities by involving writers, poets and dramatists who could prepare neo-literate literature.

As far as SCs and STs are concerned, it is necessary to ensure that lack of provision of funds does not become a problem in securing their participation. Therefore, Central Government Departments, State Governments, Voluntary Agencies, Universities and Colleges, would be expected to earmark special funds for their coverage. Special drives will be undertaken to train the instructors belonging to SCs and STs groups and literacy content would be so designed as to encourage the SCs, STs to take advantage of these programmes. Existing institutions like Tribal Orientation Study Centres, Tribal Research Institutes would be involved in planning and providing technical inputs necessary for the adult education centres attended largely by SCs and STs groups.

- d) Provision of non-literacy inputs at the adult education centres would be made in the form of short duration programmes having the potential of income generation and the agencies engaged in providing developmental services would be involved in this. Besides net-work of guidance and counselling services will be provided to the rural poor by the NSS volunteers, NYK Coordinators, Voluntary Agencies and other mass based organisations.
- e) Larger involvement of voluntary agencies is envisaged so that they can perform leadership roles not only in implementing the projects but also in organising training programmes for adult education workers and for preparation of materials both for literacy and post-literacy stages. The voluntary agencies henceforth will have greater flexibility in designing and implementing the projects. Those agencies which are involved in the upliftment of women, Scheduled Castes and Scheduled Tribes will be given preference in matters of financial assistance. It is also visualised that the performance of the agencies will also be encouraged to undertake pre-operational surveys for identifying the needs of the learners and preparing need-based material for which they will be financially assisted. They will also be entitled to get funds for providing non-literacy inputs. These additional features are expected to encourage the voluntary agencies to implement the programme in a more meaningful manner. Speedier disposal of cases of voluntary agencies for financial assistance will be done so that the difficulties faced on account of late receipt of funds do not persist.
- f) Concerted efforts will be made to involve students and non-student youths on a wider scale in mass campaigns for adult education programme as part of the National Service Schemes, NCC, and, Continuing and Extension Education Programme. They will also provide counselling and guidance services to adult learners and help in organisation of post literacy and follow-up activities. The potentialities of Nehru Yuvak Kendras in organising cultural and social programmes for the rural folk will be utilised on a bigger scale for promotion of adult education and they will be expected to organise adult education centres also.

- g) Lack of provision of post-literacy and follow-up services has been one the draw-backs in the organisation of the literacy programme in the past. This short-coming is being eliminated through creation of such facilities as part of the project design. Village Continuing Education Centres and rural libraries will be established for production and distribution of literature for non-literates. Short-duration training programmes and condensed courses will also be organised for up-grading the skills of the neo-literates and for raising their awareness on various social aspects. Among the areas for skill up-gradation, priority will be accorded to agricultural technology, including construction of wells, operation and repair of pumps, food storage, use of improved agricultural practices, bio-gas plants, solar energy, poultry farming, piggery, sericulture, fishing, carpet weaving, health, sanitation, family welfare, improved cooking methods, water purification, methods of birth control, use of smokeless chullah, etc. They will also be exposed to population education, civic rights and duties as well as citizenship education through greater use of press and mass-media and will be provided general education on various scientific and natural phenomenon. Through the provision of facilities for continuing education, opportunities will be made available to the learners to re-enter into the formal system if they so desire. They will also be educated through use of recreation and entertainment by use of mass media and folk forms of culture. Attempts will be made to see that some equivalence of the attainments in literacy and post-literacy stages is established with the formal system of education so that there is a possibility of a person joining from one system to the other at his or her convenience.

One of the factors associated with the poor performance of adult education programme has been lack of motivation with the learners first of all to attend the programme and, secondly, to continue with it till its completion. This problem is intended to be tackled by providing incentives and encouragement to the learners by honouring them in public functions and giving them preference in provision of loans and other inputs. Feasibility of giving them preference in employment will also be examined. In addition, special income generating activities to be organised at adult education centres are expected to provide them sufficient motivation for continued participation at AECs.

- i) Activities of **Shramik Vidyapeeths**, which are polyvalent in nature, would be expanded further, and the **Shramik Vidyapeeths** would be encouraged to take up programmes of adult literacy. They will also be strengthened to provide necessary resource support in organising technical and vocational courses for the benefit of adult learners.
- j) Extensive and intensive use of mass media (radio and TV) and other folk forms of communications is to be made not only for promotional purposes but also for creating a demand for literacy. It is also to be used for actual teaching. Similarly for post-literacy and follow-up programmes also the use of radio and TV

will be made to transmit information and knowledge on various aspects connected with the lives of the people taking advantage of AEP. The medium of TV is also proposed to be used for imparting training to the adult education workers because the reach of the TV is widening day by day and its potential will be most powerful in communicating the desired skills and messages. In view of this more transmission time is to be devoted on radio and TV for adult education. Expert agencies like the National Resource Centre (the Directorate of Adult Education) and the State Resource Centres would be expected to produce software for use of Akashvani and Doordarshan. Through films, plays and traditional media of communication and also printed media the post literacy and follow-up activities are expected to be revolutionised so that their impact on retention of evaluation messages and literacy skills is more clearly established. Multi-media packages will also be utilised for the purpose of promotion of literacy.

- k) The implementation of the programme should admit of greater flexibility in matters of project management. Taking into account complaints received from many quarters that the present duration of the literacy programme is too long, it is visualised, that literacy efforts could be intensified effectively if 350 hours of literacy proposed to be imparted in Phase I and 150 hours in Phase II, could be clubbed together and imparted during the course of one year so as to prevent any gap between Phase I and Phase II of the programme. This approach may be more pragmatic considering that financial assistance under the RFLP is provided by the Government of India for a total period of one year. The results may be more enduring and lasting. The Post-literacy/follow-up envisaged in Phase III of the programme (110 hours) spread over one year should be further intensified with provision of adequate material including newspapers and books for neo-literates, organisation of mobile libraries and supported effectively through the literature produced by other departments on various development programmes. Supervision is to be strengthened further and made more effective by reducing the work load with the supervisor. The project agency will also have the flexibility of organising literacy programmes in specific model and will have sufficient scope for experimentation in areas like developing equivalency with the formal system, establishing linkage with other developmental agencies.
- 1) To ensure that the Programme of Adult Education is implemented effectively, resource support at national level will have to be strengthened by developing multi-package learning modules relating to different learning groups. The Resource Centres at State Level will be strengthened and District Resource Units will be set up to provide greater support to the programme particularly in production of relevant material and training of functionaries. At the national level a communication wing in the Directorate of Adult Education will be set up to develop multi-media learning packages for teaching of adult learners, training of functionaries and for development of income, generating of income and generating programmes specially for women through

literacy. The National Resource Centre (Directorate of Adult Education) will be further developed and strengthened to enable it to discharge its responsibility more effectively as clearing house of information, guidance and support to State Resource Centres, Universities and Voluntary Organisations.

- m) To ensure the attainment of physical targets fixed every year and to regulate the quality of the programme, monitoring and evaluation mechanism would be strengthened further. The main thrust of monitoring and evaluation would be to ensure optimum utilisation of resources invested in the programme, plug the wastage and leakage points, strengthen the process of implementation for ensuring optimum results leading to overall improvements in the internal efficiency of the system. The monitoring system would be geared towards securing complete information from the implementing agencies and steps will be taken to see that only reliable and accurate information is available from the reporting agencies. The verification of the information will be the responsibility of the local implementing agency. A system of cross-check will also be devised so that mis-reporting does not occur. Creation of district parties having different interest groups represented on it is expected to help in data audit function but this responsibility will have to be shared by the local committees and members of the public who are not involved in implementation. Evaluation of the programme would receive priority and it will be done both as part of the implementation process and also through external agencies not connected with implementation. The feed back available from evaluation will be recycled into the planning and implementation process. This is expected to increase the level of achievement through the programme and also to reduce wastage of various kinds. For the post-literacy programme the expected level of attainment will be defined and equivalency will be established with the formal system of education. This will be done in consultation with agencies like NCERT and other examining bodies.

Funding

8. It is felt that the expenditure on the adult education programme will increase considerably in view of the expansion of the on-going schemes like Rural Functional Literacy Programme, Schemes of Assistance to voluntary agencies, Nehru Yuvak Kendras, Involvement of Students, Shramik Vidyapeeths, strengthening of Administrative Structures, strengthening of Resource set-up at the national, state and district levels, organisation of post-literacy and follow-up services, training, monitoring, evaluation and introduction of new schemes like provision of non-literacy inputs, creation of Productive Units at AECs and Scheme of Awards to the Instructors and learners. A provision of Rs.136500 lakhs is considered necessary in the Seventh Five Year Plan to meet the expenditure on the above schemes. The following statement gives the break-up by schemes and allocation needed under the Central and State Sector Schemes.

Statement showing suggested outlays for the
Seventh Five Year Plan (Adult Education)

(Rs. in lakhs)

Type of Programme	1985-86 Outlay	1986-87 Outlay	1987-88 Outlay	1988-89 Outlay	1989-90 Outlay	Total Outlay	Total* Coverage (Lakhs)
I.a) RFLP	3750	4350	5000	5650	6250	25000	250
b) Vol. Agencies	1000	1500	2000	3000	3500	11100	110
c) NYKE	100	100	100	100	100	500	5
d) Univer-sities	600	800	1000	1200	1400	5000	50
e) SAEP	5000	6000	7500	9000	11000	38500	385
II.Strength- ening of Admn.Struc- ture, Trg. Monitoring & Eval.	1045	1275	1560	1895	2225	8000	-
III.Strength ening of Resource Institutions, National, State Distt. level.	400	400	400	400	400	2000	-
IV.Post- literacy & follow-up Programme.	4180	5100	6240	7580	8900	32000	-
V. Develop- ment of non-liter- acy compo- nent i.e. upgradation of skills.	780	960	1170	1420	1670	6000	-
VI.Develop- ment of linkages and Comm- unity par- ticipation	780	960	1170	1420	1670	6000	-

(Rs. in lakhs)

Type of Programme	1985-86 Outlay	1986-87 Outlay	1987-88 Outlay	1988-89 Outlay	1989-90 Outlay	Total Outlay	Total* Coverage (Lakhs)
VII. Schemes of Awards	500	500	500	500	500	2500	...
Total	18135	21945	26640	32165	37615	136500	800

Distribution between

a) Central Sector	10435	12705	15099	18305	20675	77210
b) State Sector	7700	9240	11550	13860	16940	59290

9. The revised pattern of financial assistance as applicable to the adult education project envisages an expenditure of Rs.2831 (recurring) and Rs.233 (non-recurring) per centre which means that a total amount of Rs.3114/- is spent on adult education centre. On this basis the total cost of covering 1 person through the literacy programme comes to about to Rs.100/-. Apart from this, 40% of the above cost would be needed for provision of post literacy and follow up services, 5% for upgradation of skills and another 5% for development of linkages and community support. If we add these costs to the expenditure on running the adult education centre and the expenditure on evaluation and administration, the per learner cost comes to about Rs.170/-. Thus, a sum of Rs.13,650 million would constitute the minimum essential requirement during the Seventh Plan, to ensure substantial expansion of all literacy programmes under the Rural Functional Literacy Project, State Adult Education Programme, Assistance to Voluntary Agencies, Universities and Nehru Yuvak Kendras through which 800 lakh illiterates in 15-35 age group would be covered. In addition to this, the development departments and public and private sector industries would also be expected to provide substantial amounts not only for literacy but for post-literacy programmes also. The Department of Sports, which is responsible for implementation of the National Service Scheme, would similarly be expected to make adequate provision of funds in its own budget to promote substantial expansion of literacy activities through participation of student youth under the National Service Scheme. These would cover up the remaining 70 lakhs illiterates in 15-35 age group and make the coverage of total illiterate population in 15-35 age group possible, by the end of the plan period.

* Remaining 70 lakhs are expected to be covered under programmes of other departments.

CHAPTER VIII

EDUCATIONAL TECHNOLOGY

Introduction

The importance of educational technology for widening of educational programmes was emphasised in the Sixth Plan and the possibilities of utilising INSAT facilities specially at the elementary stage was envisaged. The Seventh Plan Approach Paper also recognises the emerging role of broadcasting, telecommunications and computers in providing informations, imparting skills and developing capabilities to the mass of pupil through electronic media. Taking note of the experience with SITE in 1975-76 which established the potentials of satellite broadcast television by showing that it was possible to reach effectively and at low cost to very large number of school children, adults, teachers and extension workers in remote areas where communication and educational facilities were inadequate, the Group recommends further expansion and strengthening of the educational technology scheme whereby central assistance is being provided in selected States for setting up reprographic and photographic facilities and some sound and video recording equipment. It is in this direction that the Working Group on Educational Technology has suggested number of programmes for strengthening and expanding of educational technology cells in the states.

Programmes and Thrust Areas

Major programmes and thrust areas in Educational Technology and Distance Learning recommended by the Working Group are as follows:

- a) Production of Radio Programmes
- b) Production of Television programmes
- c) Introduction of Radio and T.V. inputs in open schools and open university.
- d) Experimentation with High Technology areas such as introduction of computer literacy programmes in selected schools.
- e) Strengthening of training institutions/orienting educational planners and administrators to different aspects of educational technology.

Production of Radio and Television Programmes

2. Radio and Television programme production Centres are already being set up in 6 INSAT States for producing ETV and radio programmes for all levels of education. Such programmes to have an impact, It has been suggested that if development of software should be taken

over by the educational authorities and production of programmes should be at a decentralised level as has already been done in the context of INSAT programmes. Thus the thrust of the Seventh Plan is to develop a cadre of software educational producers who would undertake the production on different media, for different target audience. For Radio programmes proposal is for setting up sound studios in 20 States and Union Territories and for Television programmes, the Groups proposes to set up SIETS/Production Centres in another 8 States. These would ensure that production facilities would be available in major regional languages.

3. For optimum utilization of Radio/TV Programmes, provision of radio and television sets to all schools has been suggested. In order that universities can take advantage of the software produced in their 25 centres to be set up for the purpose, each university is suggested to be provided with a library of software, with VCR facilities for playback of programmes. During the Seventh Plan, this has been suggested for about 50 universities.

4. The total cost of software production and utilisation of Radio and T.V. programmes has been estimated at Rs.14826.50 lakhs. (Rupees 4184.00 lakhs for radio programmes and Rs. 10642.50 lakhs for T.V. programmes).

5. Introduction of Radio and Television inputs in open schools (CBSE School + Schools in 4 States) and open university is yet another major programmes in the Seventh Five Year Plan. The proposal for starting of an open university for teacher training, continuing education, training of public sector and government staff for new vocational courses and the production of a wide range of software involves a cost of Rs.2500 lakhs. Open schools involve a cost of Rs.500 lakhs.

6. Experimentation with high technologies is a major thrust area in the Seventh Plan. In order to keep pace with the fast expanding technologies in the world, use of computer aided instruction, teletex and slow scan broadcasts have been suggested. The programmes of computer literacy is already being implemented in collaboration with the Ministry of Education on a pilot project basis initially in 250 secondary schools throughout the country. Appropriate curriculum for teachers and students have been designed in NCERT. The Group proposes to introduce this programme in at least 10,000 more secondary schools during the Seventh Plan period. The total cost of equipping 10,000 schools with computer system preparation of course material for students and teachers, organisation of teachers' training etc. comes to Rs. 4,250 lakhs.

7. The availability of the series of synchronous satellites has made it possible to spread education far and wide and more effectively. The University Grants Commission has already set up six centres for training and preparation of software for 1 hour educational programme on T.V. via the satellite mainly for undergraduates, generally educated public and for others. These programmes have to be extended in time, in various languages and have to be made gradually more curriculum oriented. They could be in fact the forerunners of the open university. Audio visual material has also to be supplied to

libraries so that students have powerful tool of learning available to them.

8. The Working Group also suggests strengthening of training institutions in order to meet the training requirements for setting up a production infrastructure in each State/UT. For orienting educational planners and administrators to different aspects of educational technology, an amount of Rs.50.00 lakhs has been suggested.

Financial Outlay

Financial requirements of thrust areas/major programmes is indicated in the Table below, details, however, have already been covered in a separate note on Financial Estimates for Educational Technology and Distance learning for the Seventh Plan.

TABLE

Major Thrusts/Programmes	Financial Requirements (Rs. in lakhs)
1. Production and Utilisation of Radio Programmes	4184.00
2. Production and Utilisation of T.V. Programme	10642.50
3. Introduction of Radio/T.V. input in open schools	500.00
4. Radio/T.V. input in open university	2500.00
5. Experimentation with high technologies: Computer Literacy programmes (Costing for 10,000 schools)	4250.00
6. Training of Educational Planners and Administrators	50.00
7. Production and Use of Low Cost Teaching Aids	387.50
8. Graphic and Reprographic Aids	5234.75
T o t a l	27748.75

CHAPTER IX

DEVELOPMENT OF LANGUAGES

Language as a basic skill of expression and communication helps thinking, imagination, perception and aesthetic appreciation. Therefore, the development of languages is of basic importance for all educational development programmes. During the Sixth Plan, the activities and programmes undertaken in the field of languages can be divided into four groups (i) Promotion of Hindi (as envisaged under article 351 of the Constitution); (ii) Promotion of Modern Indian languages (as provided in National Policy on Education). (iii) Promotion of English and other foreign languages (as provided in the Education Commission 1964-66 Report), and (iv) Promotion of Sanskrit and other classical languages such as Arabic and Persian. Other languages for which the Centre has special responsibility like Urdu and Sindhi also received attention.

2. Besides the programmes undertaken by the State Government for the development of regional and other languages, the programmes at the central level are being undertaken either directly by the language/Sanskrit Division (appointment of teacher, awards, exhibitions, scholarships etc.) or through (a) Central Hindi Directorate, New Delhi, (b) Commission for Scientific and Technical Terminology, New Delhi (c) Kendriya Hindi Sansthan, Agra, (d) Central Institute of Indian Languages, Mysore (e) Central Institute of English and Foreign Languages, Hyderabad (f) Bureau of Promotion of Urdu, New Delhi and (g) Rashtriya Sanskrit Sansthan, New Delhi. These institutions/organisations along with their regional centres and in collaboration with State Government institutions have been executing various plan schemes for the development of languages.

New Thrust Areas

3. While the Sixth Plan schemes will be continued, after due scrutiny and needed modifications for greater cost effectiveness, the emphasis in the Seventh Plan would be on new approaches and strategies. An important thrust will be to develop the capabilities of the existing institutions to work at the grassroot levels which may require the setting up of a district regional/sub-regional units and greater emphasis on extension work and adequate linkages with existing educational or other institutions.

4. The establishment of a number of new institutions has been proposed for providing world perspective in language development. In this category fall the proposals for the establishment of International University for Hindi, International Institute of Sanskrit and Allied Studies etc. However, greater emphasis will be given to the strengthening/development of existing institutions, particularly those concerned with research and development and teaching/training functions.

5. It is proposed to ensure mutual reinforcement and enhancement of the impact and various activities by identifying and implementing those programmes which are complementary rather than taking up disparate and isolated programmes. The new thrusts and approaches in various programme areas are discussed below.

Publications

6. Instead of a very large number of schemes, it would be desirable to think of a selective effort at publications so that materials of good quality become available for wider dissemination within a reasonable time. The present modality of entrusting publication and

administration machinery has not always led to satisfactory results, particularly in meeting the deadlines. Those publications which will assist in the realisation of the goals laid out in the language policy will receive higher priority. To ensure a much larger publication activity it would seem necessary that effort is not restricted to institutions supported or maintained by the government. Scholars of repute, university departments and literary organisations will need to be involved so that the activity is carried out expeditiously besides ensuring higher quality by entrusting the publications to the best talent available.

Strengthening of existing Institutions

7. The strengthening and consolidation of work already being done in existing institutions will be given higher priority so that they are enabled to bridge the gap that exists at present between requirements and actual supply of materials and personnel. Extension work to be undertaken by these institutions must receive greater attention. From this point of view the extension/regional and district centres proposed to be established under the auspices of these institutions must be viewed as an essential input for the growth of these institutions which have already reached a critical stage of development.

Voluntary Organisations

8. Assistance to voluntary organisations will continue to find an important place in the Seventh Plan as they are rendering important service in the spread of languages of the Eighth Schedule. However, because of inadequate machinery for supervision, actual work done by many voluntary organisations is not regularly monitored. While it is not desirable to set up an inspection machinery exclusively for this purpose, the purpose could be achieved by providing minimum staff to existing institutions. It is recommended that apart from organisations working in Hindi, much higher stress shall be given in assisting voluntary organisations concerned with other regional languages.

9. Some of the activities which have been promoted under earlier schemes could now be discontinued and effort made to obtain a much higher output from voluntary organisations which, due to flexibility in approach, are able to work in a community with much greater homogeneity than many governmental institutions. With this end in view, provision would require to be made for assisting innovative and experimental projects to be undertaken by voluntary organisations. It would be necessary to ensure that results from experimental work are fed into teaching and learning of languages either formally or non-formally.

Appointment and Training of Teachers

10. Appointment and training of teachers should continue to find a high priority in the Seventh Plan since implementation of the three language formula depends substantially upon the supply of teachers competent to facilitate the learning of languages by students. While assistance to non-Hindi speaking states for training and appointment of Hindi teachers will continue, a new scheme providing for the appointment of other language teachers in Hindi-speaking States has been proposed. It is suggested that for this 100% Central assistance should be given to the States.

11. The capacity of existing institutions to undertake pre-service training is very limited, it is, therefore, essential to provide for a very large programme of extension activities, and short-term training, undertaken more scientifically. While institutions may continue to provide intensive long duration training, it is essential to think of short-range inservice training package and modules directed to provide specific competencies. Media support and use of innovative methodologies to ensure much larger coverage than has been possible so far will need to form important components of training effort. Institutions providing training will be enabled to set up strong extension departments so that inservice training becomes one of their major regular activities. Alternative modalities for inservice training like Correspondence Courses followed by contacts, regular mailing of materials, attachment to local institutions, use of satellite etc. will need to be thought of.

Educational Technology/Alternative Media

12. With the availability of transmission facilities - both radio and television - on a near universal basis, it would be necessary to increasingly utilise mass media for language learning. For this purpose, it would be desirable to undertake a sizeable effort at software production, by utilising expertise available in governmental/semi-governmental institutions like NCERT, AIR, Doordarshan etc. and by employing, on contract, experts. Selected language institutions would be assisted to develop capability to produce radio/television programmes. Simultaneously, there is need to provide to educational institutions facilities for receiving transmission.

District Centres

13. The need for setting up field level organisations at district level which become necessary in view of the vastness of the country, has been stressed for providing guidance and assistance to educational institutions on a regular and continuous basis. With this end in view the establishment of district centres has been suggested for Elementary education, for promotion of Sanskrit and English languages etc. Instead of thinking of separate arrangements for each distinctive purpose it would be desirable to consider the establishment of a multi purpose district centre. Apart from saving and optimising on costs, a common district centre could promote mutual enrichment and reinforcement. This would be particularly important in the field of language development considering that the Indian languages - classical and modern - have so much in common.

Development of Hindi

14. Having been adopted as the official language of the Indian Union under the Constitution, the Central and the State Governments have been endeavouring to develop this language. The Central Hindi Directorate New Delhi and Kendriya Hindi Sansthan Agra at the National level are implementing schemes for the propagation, development and dissemination of Hindi. During the Seventh Plan, besides the continuation of the programmes undertaken during the Sixth Plan, the following new programmes would be started:

The Kendriya Hindi Sansthan Agra would be provided with hostel building and other buildings so as to provide for additional teacher training facilities. The regional centres at Gauhati, Hyderabad and Delhi would also be provided with additional accommodation. Besides, a new centre at Shillong would be established for the North Eastern Region. Also 50 district centres would be established under the Central Hindi Directorate, New Delhi. In order to provide international perspective to Hindi, International University of Hindi has also been proposed to be established.

The publication of books will be continued at an increasing scale. 25 bilingual and tri-lingual dictionaries would be completed. 60 exhibitions at various places would be organized for popularising of Hindi Books. Publication of books in regional languages particularly for the university level, would be continued. English books for Medicine, Engineering, Agriculture and Veterinary Science and Pharmacy would be translated into Hindi and original books in Hindi on these subjects would be published by the Commission for scientific and technical terminology. Hindi workshop in non-Hindi areas would be organised, two seminars of eminent writers one each for Hindi and non-Hindi areas would be held and 16 prizes for Hindi writers for non-Hindi speaking areas would be given. The scheme of appointment of Hindi Teachers in non-Hindi speaking areas would be continued. Besides, it is also proposed that non-Hindi teachers would be appointed in the Hindi Speaking areas for regional languages other than Hindi. Financial aid to voluntary organisations for the propagation and development of Hindi would be continued.

Development of Modern Indian Languages

15. There are three schemes under this head viz. the development of Urdu, Sindhi and other Indian Languages.

Development of Urdu . Urdu is the embodiment of national composite culture. The programmes for the development of Urdu are being organised by the Bureau for the Promotion of Urdu (BPU). All the programmes undertaken during the Sixth Plan will be expanded during the Seventh Plan. It is proposed that 20 more calligraphic centres would be established during the Seventh Plan besides the strengthening of 30 such centres established during the Sixth Plan. A calligraphic centre would also be established in the Bureau for Promotion of Urdu. Publication of Urdu books was undertaken during the Sixth Plan for popularising of Urdu and 242 books are likely to be published by the end of Sixth Plan. During the Seventh Plan 250 new books would be published. Besides the completion of an Urdu Incyclopadia in 12 volumes, publication of Reseach journal in Urdu is also proposed for the Seventh Plan. Starting of correspondence courses on the pattern of Cetral Hindi Directorate is also proposed. Desides, 15 workshops for urdu teachers and one National Seminar has also been proposed. In addition, a Central Urdu Library and propagation of Urdu through performing art like Ghazals and Qawwalies has also been proposed.

Promotion of Sindhi . The Government of India have a special responsibility to develop non-regional languages like Sindhi besides Urdu. For the propagation of Sindhi, the main programme during the Sixth Plan has been the publication of books in Sindhi besides the publication of Sindhi dictionary and five children books, which have been printed in Hindi. In addition to the continuation of these programmes, cash award to eminent writers in Sindhi and organising of writers workshop in Sindhi Language have also been proposed for the Seventh Plan.

Central Institute of Indian Languages, Mysore : The main programmes of the Indian Institute of Languages proposed for the Seventh Plan are (a) provision/completion of the buildings of the Institute as well as the regional centres (b) establishment of five extension centres, (c) establishemt of Urdu Centre in Lucknow and (d) increasing the intake of teacher trainees.

English Language Teaching

16. Concern over the deteriorating standards in English Language has been expressed in various quarters. No realistic and comprehensive programme has, however, yet emerged for undertaking the much needed improvement. The few schemes proposed towards the end of the Sixth Plan have not made much headway. The present institutions run by State Governments and the CIIL are unable to meet the requirements of training or materials, partly because the strategies that have been followed over the yeas are not always based on a careful analysis of

needs and requirements. In order to step up the programme considerably during the Seventh Plan it is essential to provide for consolidation of activities of existing institutions, as also to provide for experimentation and expansion of extension activities in the field. It seems necessary to formulate, more clearly, the objectives for English Language teaching at various levels of education, attempt modernisation of courses and methodologies of teaching and undertake on a large scale the production of materials and training personnel.

Development of Sanskrit

17. The study of Sanskrit has a special place in our national culture. Not being the spoken language in any of the Indian states the responsibility for the development of Sanskrit is of the Central Government which has been conducting the programmes for the promotion of Sanskrit studies through 'Rashtriya Sanskrit Sansthan'. At present there are three universities, seven kendriya Vidyapeeths and twelve Adarsh Sanskrit Mahavidyalayas/Sansthan. During the Seventh Plan it is proposed to establish another four new kendriya Vidyapeeths and ten Adarsh Sanskrit Mahavidyalayas. Besides the establishment of fifteen Central Sanskrit Schools has also been proposed. With a view to propagate the importance of Sanskrit studies emphasis would be laid on encouraging of Oral Vedic Tradition. Besides, establishment of an International Institute of Sanskrit has also been proposed for the Seventh Plan. In addition to the establishment of 100 districts centres, organising of language camps for Sanskrit and various other programmes for propagation of the oral vedic tradition with an outlay of Rs. 140 lakhs has been proposed. Financial assistance to voluntary organisations engaged in the propagation of Sanskrit would be continued at an increased scale.

Sectoral Responsibilities

18. The basic objective in language teaching is to develop communication and comprehensive skills among students and the people in general. This is true for any language. The comprehension and communication skills of students, whether in Hindi, regional language or English, should be of a standard of adequacy, if not of excellence. For this purpose it would be necessary to involve State Governments closely in the training of their teachers in linguistic abilities. Without effective teaching language learning would be inadequate and it would be difficult for a child studying even in the regional medium to comprehend or communicate with any degree of proficiency. At all levels of education - elementary, secondary, technical or higher education - there should be provision for simultaneous development of linguistic skills, alongwith subject learning. This responsibility will have to be shared by the States, different sectors in education, and by colleges and universities.

19. Different sectors, States and universities can draw upon the existing institutional facilities for language development. They must also develop arrangements for remedial coaching and for training of

personnel in relation to textual materials, as well as for developing texts to judge the linguistic deficiencies of students in their charge so that suitable remedial coaching can be undertaken. Only with a concerted effort would it be possible to ensure that students in higher education are able to comprehend instruction no matter what the medium is.

State Sector

20. The responsibility for preparation of textbooks in regional media should shift in the Seventh Plan from the Centre to the States. In the plans of the States there should be adequate provision for State level institutions to undertake coinage and evaluation of terminology in their languages and for the production of materials for different clientele. Specific attention would need to be given to the development of capabilities of such institutions as State Council of Educational Research and Training/State Institutes of Education to undertake programmes which will lead to improvement in the teaching-learning of languages, particularly English. The State Educational Technology Cells, the State Institutes of Educational Technology should be supported to develop alternative modalities for training of teachers in their own regional languages, using the new communication technologies.

Priorities

21. The following inter se priorities are recommended among various programmes:

- i) Appointment/Training of Teachers.
- ii) Technology Correspondence Courses etc.
- iii) Strengthening of existing institutions.
- iv) Voluntary organisations.
- v) New institutions.

International Hindi University/International
Institute of Sanskrit and other Languages

- vi) Publications.
- vii) English Language Teaching.
- viii) Inter-Sectoral Requirements
- ix) District Centres.

22. Language development should receive a much higher priority in the Seventh Plan than was accorded during the previous plans. It is felt that against a plan provision of about Rs.24 crores in the Sixth Plan an outlay of Rs.81 crores should be made available. A tentative programme-wise break-up is indicated below.

(Rs. in lakhs)

I t e m s	Proposed Outlay	
	Working Group Report	(Revised)
i) Appointment/Training of Teachers	193.00	350.00
ii) Extension activities	1,189.80	1,300.00
iii) Technology/Correspondence Courses, etc.	317.74	500.00
iv) Strengthening of existing institutions	2,658.88	2,700.00
v) Voluntary Organisations	699.00	700.00
vi) (a) International Hindi University	300.00	100.00
(b) International Institute of Sanskrit and Allied Studies	200.00	100.00
vii) Publications	936.00	900.00
viii) English Language Teaching	347.50	550.00
Inter-Sectoral Requirements	-	200.00
ix) District Centres	100.00	100.00
x) State Sector	300.00	600.00
T O T A L	7,241.92	8,100.00

CHAPTER X

BOOK PROMOTION

Introduction

Books constitute the most important tool of education and no country can move ahead in educational, scientific and technical fields without a viable national authorship and publishing industry. Unesco investigations have clearly shown that more than 50 per cent in the rise of the gross national product in any given country is entirely dependent upon the level of education of the people engaged in the production of its goods and services. The level of education is determined by its most effective tool, which is books of quality produced in ever large and larger quantities. Books serve as a repository of the cultural heritage of the people and also as means of disseminating it. The new and continuing discoveries of science and technology and the mass media of communication, tremendous though they are in their impact, have not diminished the importance of books in the present-day context of things.

2. Book publishing in India has come a long way after Independence. Today, India is among the ten largest book producing countries in the world and ranks third, after the USA and the UK, in the production of English titles. India, however, is far behind the developed countries not only in the matter of the per capita production of books but also in the standards of both content and get-up. The average number of copies printed is also about 2500 which is much below the standards of the developed countries.

Need for Books

The number of students studying in colleges and other institutions of higher learning estimated at 3,96,745 in 195-51 rose to 45,42,114 in 1979-80. The average growth has been about 10 per cent per annum. With this rapid growth in the number of students seeking higher education, there has been a corresponding increase not only in the number of universities, colleges and other institutions of higher learning in India during the past two decades but also in the number of subjects and courses of studies taught in these institutions has also multiplied manifold. There is need to provide textbooks at all levels, supplementary reading materials and general books for different age groups books for neoliterates and books on classics in cheaper editions at reasonable prices. Shortage of such books in rural areas is more acute than in urban areas. Ways and means are to be devised by which books published by various agencies in the public and the private sector find a place in all libraries and can be made available even in the remotest areas at reasonable prices. There is need to improve the quality of printing and binding, keeping the prices of books at reasonable rates, provision of concessional postal rates and suitable arrangements for distribution in rural areas. Means are to be found to provide printing paper at reasonable rates. locating and encouraging authorship, editorial discrimination, book

production techniques and materials, equitable copyright policy balancing the interests of readers, authors and publishers using mass media for advertisement and publicity, book market development, distribution of journals and training of personnel are some of the aspects that require due consideration.

4. A major problem, therefore, that India faces is to provide suitable reading material at a reasonable price for all categories and levels of readers including the students, children, the increasing number of neo-literates and the educated classes in general. Believing that for some time to come, Indian Universities would have to rely on books of foreign origin, the Government has adopted a liberal import policy for books. But since the country cannot continue to rely upon external resources of supply to meet the demands for books for a varied categories of readers, a number of schemes have been initiated by the Ministry of Education for the development of a balanced programme for the production of Indigenous books viz.:

Programmes

1. Production of Text and Reference Books

- a) Low-priced edition of foreign books,
- b) Scheme to subsidise university level text and reference books,
- c) Books in regional languages,
- d) Prizes for books adjudged best in regional languages;
- e) Core books, and
- f) Fellowships for writing of books.

2. Children's Literature -- Assistance for

- a) Nehru Bal Pustakalaya scheme operated through National Book Trust.
- b) Books published through Children Book Trust.

3. Literature for General Reading

- a) Adan Prada -- scheme to translate books from one language to other Indian languages with a view to foster national integration.
- b) Genral Publication Programme of National Book Trust under various series like National Biography, Folklore of India, World of Today, Young India Library and India the land and the people for the young Adults.

- c) Production of literature designed to broaden the understanding of the country, its people, history, cultural and linguistic pattern and progress registered in various sectors of economy through the publications division of the Ministry of I&B.
- d) Literature for neo-literates - scheme to award prizes to authors of books for neo-literates being administered through the Directorate of Adult Education.
- e) production of books in Urdu through the Bureau for promotion of Urdu and promotion of Books in Sindhi and other languages including Sanskrit.
- f) promotion and coordination of literary activities in these Indian languages and publication and distribution of books in these languages not normally published by private publishers through Sahitya Akademi.

Plan of Action in the Seventh Plan

5. Realising that books perform an essential role in promoting the quality of life and facilitate the participation of people in development activities and contribute to social and national integration, the Working Group has come to the conclusion that it is imperative to take all possible steps to promote the book publishing activity in the country. An all out effort is required to develop the reading habits among the children and the masses and to make right type of reading materials easily available at reasonable prices both in the urban and rural areas. The public library system needs to be strengthened and infrastructural facilities for improving the publishing industry, viz., supply of paper at reasonable rates, tax concessions, credit facilities, training facilities on the various aspects of publishing especially for the illustration of children's books etc. are required to be provided.

6. Complete statistics relating to the production of books in the country are not available. According to the Unesco Statistical Year Book the number of titles produced during 1981 in USSR were 83,000, in USA 76,973, in UK 42,972 and in India 11,562. The average number of copies printed in India is about 2500 as compared to an average of about 10,000 in the developed countries. With out aim to achieve universalisation of elementary education and to achieve the target of cent per cent literacy by 1990, the demand for books is likely to grow manifold and therefore, steps are required to activate the publishing industry accordingly.

7. According to an estimate, the number of titles even at present being published is more than 20,000 per annum. The National Library, Calcutta compiles information only in respect of the titles which it receives from the publishers, under the Book Delivery Act. The correct picture is not being reflected because of the publishers do not send copies of all of their publications to the Library.

Therefore the need for sending the books to the Library should be publicised and if need be provisions made in the law for supply of copies should be strictly enforced by providing some penal clauses in the Book Delivery Act. Alternatively, the question of compulsory registration under International Standard Book Numbering System or registration under the Copyright Act may be examined.

8. We may aim to a production of 40,000 titles per annum by the end of the Seventh Five Year Plan and fix a target for book exports of Rs.50 crores per annum to be achieved by 1990. In order to achieve this quantitative target and to bring about qualitative improvements, in the methods of publishing and to quench the thirst for reading among the various categories of readers, the existing schemes with minor changes as explained in the notes below, may be carried out and new schemes as detailed below may be initiated.

1. To set up a National Publishing House. It should act as an apex body and it should have a printing press and facilities for .translation .into .various .Indian .languages .and simultaneous publication of the same in various Indian languages.
2. To provide cheap credits to the publishers, a Book Finance Corporation may be set up.
3. A National Encyclopaedia of knowledge for children should be brought out during the Seventh Five Year Plan.
4. An Institute for Training and Research for book promotion should be established.
5. A National Museum of Books may be formed.
6. A Society of Authors should be set up.
7. Specific series of books may be planned and published, for example a series of:
 - i) best of best for children books covering exploration, how and why etc,
 - ii) best of best for adolescents; and
 - iii) best of best for university students may be brought out. For this purpose a master list of titles which we aim to publish during the Seventh Five Year Plan in cooperation with private and public enterprises may be drawn up.
8. International standard Book Numbering System may be introduced in India and Statistics relating to book publishers and book production in India brought upto date.
9. A scheme to make a bulk purchase of children books and their distribution through the State Governments may be drawn up.

10. "20th Century Indo-Soviet Co-publication Literature Project".
11. Book Exchange Programme and visit of delegations of Publishers/Authors under Cultural Exchange programmes.
12. The library movement in the country may be strengthened and a home library movement initiated.
13. Classics may be brought out in different languages.
14. All the awards winning books may be translated into various languages by the Sahitya Akademi.

The steps taken by the State Governments and Union Territories for promotion of books should be coordinated and the State Governments urged to take the required steps for the book promotion in their States.

9. Besides continuing the present schemes in operation with larger outlays recommended by the Working Group, the following new schemes need be initiated in accordance with the recommendations of the Working Group:

1. Setting up of a National Publishing House.
2. Book Finance Corporation.
3. National Encyclopaedia of knowledge.
4. Institute for Training and Research in Publication.
5. National Museum of Books.
6. Society of Authors and Composers of Musical works.
7. Specialised Publications of Planned Series of Books for various categories of persons.
8. Introduction of International Standard/Book Numbering System and Maintenance of Statistics relating to Book Production.
9. Indo-Soviet Co-publication programme.
10. Bulk purchase of childrens' books and their distribution through State Governments.

10. The outlay required for this sector in the Seventh Plan is estimated to be of the order of Rs.30.47 crores, of which Rs.18.35 crores are for the continuing schemes.

CHAPTER XI

SCHOLARSHIPS

The Government of India had been conscious of the need to promote educational interests of talented students who are unable to prosecute their studies because of financial handicaps. With this purpose in view a large number of scholarship programme have been implemented in the Five Year Plans. Most of the programmes are financed out of the non-plan provisions of the Ministry of Education & Culture. However, two schemes for which provisions are provided in the plan and were being implemented in the Sixth Five Year Plan are (i) National Scholarship, and (ii) Scholarships for Talented Children from Rural Areas.

2. It has been felt that the coverage of the scholarship scheme being implemented at present requires to be expanded, particularly in view of the fact that increasing number of students are seeking admission to educational institutions providing education at the second and third levels. In order to assist more students with financial support, it has been suggested that the coverage of the following scholarships schemes may be increased during the Seventh Five Year Plan:

- (a) Under the National Scholarship Scheme the number of students to be assisted may be increased from 27000 to 56000 by 1990. It is expected that by providing scholarships to 56000 students, it would be possible to cover about 10% of the meritorious students as compared to 5.2% at present.
- (b) The number of awards under the scholarship for talented children of rural areas should be increased from the existing 33000 to 60000 by 1990.
- (c) As against 500 students being provided, scholarships for enabling them to study in approved residential schools, efforts should be made to provide such scholarship to 1000 children. The scheme is at the moment being implemented as a non-plan programme. It would be only in respect of 500 additional scholarships that provisions would have to form part of the Seventh Five Year Plan.
- (d) The number of scholarships for studies abroad may be increased from the existing 50 to 100. This scheme also forms part of the non-plan programmes of the Ministry and it would be only in respect of 50 additional scholarships that provision would have to be made available as part of the Seventh Five Year Plan.

3. The level of expenditure reached in 1984-85 on scholarship programmes, particularly, the National Scholarships and Scholarships for Talented Children from Rural Areas will form part of the non-plan budget provisions of the State Governments. The provision required for stepping up the coverage of the programmes listed above would have to be reflected in the Seventh Five Year Plan. It is estimated for

financing 4 scholarship programmes in regard to which step up in the coverage of beneficiaries is proposed, details of these programmes are given below.

Scheme	Additional coverage during the Seventh Plan	Seventh Plan Provisions (Rs.in crore)
(i) National Scholarship	56,000	95.00
(ii) Scholarship for talented children from rural areas	60,000	25.00
(iii) Scholarships for study in approved residential schools	500	1.50
(iv) Scholarship for studies abroad	50	4.50
T o t a l		126.00

4. The above provisions will form part of the Plan of the Ministry of Education and Culture. Some outlays would have to be provided in the state sector for scholarships scheme that will be implemented at the State level. It is presumed that the State Sector outlays have already been built in the proposed plan outlays which have been recommended under different sectors of education.

CHAPTER XII

ART AND CULTURE

1.1 To say that education is fundamental to economic development is a truism. To draw attention to the fact that development without Culture is a machine without direction or a human being without a soul, is to state the obvious.

1.2 The planning of culture presents unsurmountable problems, its very definition eludes many; it can be a narrow definition of only arts and archaeology or it can be a definition which is totally all comprehending and all permeating. Planning in this sector has therefore to keep in view the vast canvas as also the limited nature of planning. The Steering Group therefore repeatedly drew attention to the complex, intricate and multi-layered, multi-dimensional cultural fabric of the country, both in time and space. The incredible cultural continuity has survived through 5,000 years of history marked by period of unrest, invasions, wars, political subjugation, economic under-development along with a value-system which has conditioned guided and governed a whole people, today numbering 684 million, spread over an area of 3,276,141 square kilometres comprising a bewildering multiplicity of races, castes, ethnic groups, sub-cultures and religious faiths.

1.3 In the light of this complexity, the Steering Group feels that the planning for education and culture has to be unambiguous in its goals and cannot be ambivalent where it speaks of fostering plurality with an underlying unity and at the same time hoping for a common uniformity of classes, castes, regions, religions, linguistic groups, socio-cultural diversifications.

1.4 The models that have been adopted for education, public administration and, for that matter, social change and policies have been by and large monolithic unidimensional and not plural. Cultural planning and policy cannot be dissociated from policies of education, tribal and rural development, the growth of small town clusters and the establishment of major cosmopolitan metropolis.

1.5 The pre-independent India's Policy of dissociating modern education from the ancient and medieval traditions of education and culture in the country led to a hiatus between the modern educated Indian and the Indian who had been brought up through traditional systems of education. Also, since greater emphasis was laid on the modern education and encouragement given in the matter of jobs, positions etc. the modern educated Indian who was alienated from his roots was by and large responsible for policy and planning. Alongside was the other stream of the traditional systems of education as also another group of institutions such as museums, the galleries and art academies, language institutions, institutions in the field of Indology who had nothing to do with the new formal system of education.

At this moment, an Indian history and development of India, it is necessary to re-establish the broken links between the institutions of modern education and the institutions who are charged with the responsibility of preserving and conserving the heritage. It is also necessary to enrich the institutions of modern education with the learning skills and wisdom of the traditional system and to bring a modern approach valid for contemporary needs to the traditional institutions. The Steering Group laid great emphasis on the need to re-establish dialogue and create meaningful bridges.

Review of Sixth Plan Programmes

1.6 The Steering Group on Art and Culture undertook the review of the progress made in different fields under Art & Culture during the Sixth Five Year Plan. It noted the setting up of the National Arts Council under the chairmanship of the Prime Minister. It hoped that the Council would look after coordination of activities of institutions of arts, archaeology, anthropology, archives, museums, libraries and would provide guidelines for the programmes of the institutions and agencies engaged in the preservation and conservation of cultural heritage.

1.7 The group also welcomed the setting up of National Advisory Board for promotion of Buddhist studies and felt that the activities in the field would be further strengthened and consolidated in the Seventh Five Year Plan.

1.8 Despite the progress being made, the Steering Group expressed its concern for lack of infrastructural facilities in the State/UTs. It observed that in many States there is no uniform pattern of organisation for cultural activities and recommend that those States/UTs who do not have separate Departments of Culture to institute one at the earliest.

Priorities in the VII Plan

1.9 The Steering Group identified that the main thrust in the Seventh Plan for the programmes of Art & Culture would be on,

- a) Preservation, Documentation and Conservation of Cultural Heritage; and
- b) Contemporary Creativity, and
- c) Stress on programme relating to inter-linking of the sectors of education with those of Culture. Schemes for inter-linking of the sectors of elementary education, secondary education and higher education with not only archaeology, archives, art history etc. but with rural and tribal arts, oral traditions and ancient and modern languages.

1.10 The Steering Group observed that the Sixth Plan on Art & Culture could be taken as a point of reference but not as a model to determine financial provisions and priorities.

Financial Outlays:

1.11 The Steering Group expressed its concern over the insignificant outlays that have been provided in the successive five year plans for the sector - Art and Culture in comparison to actual requirements of preservation and conservation of cultural heritage, national pride in ancient civilization and magnificence of diversity. The following are the figures of outlays and expenditure for the last Five Year Plan to Vith Five Year Plan.

Plans	(Rs. in Crores)			
	Education		*Art & Culture	
	Outlay	Expenditure	Outlay	Expenditure
Ist Plan	169 (7.6)	153	a	a
IIInd Plan	277 (5.9)	273	4 (1)	3
IIIrd Plan	560 (6.9)	589	10 (2)	7
IVth Plan	822 (4.9)	786	13 (2)	12
Vth Plan	1285 (3.3)	911	37 (3)	27
Vith Plan	2524	NA	84 (3)	121 (Anticipated)

a Included under General Education.

* Figures in parentheses in Col. 4 indicate percentage to total outlay on Education while those under Col. 2 represent percentage to total plan outlay.

1.12 The above table indicates the outlays that have been provided to Education in various plans which inter-alia included the share of Art & Culture. The outlays on Art & Culture is just 3% of the total outlay on Education.

1.13 Further, if a comparison is made on the share of Art & Culture in the Sixth Plan to total outlays on Social Services then the percentage is still lower. This is evident from the table below:-

(Rupees in Crores)

	Centre	States	U.Ts.	Total
1. Art & Culture	51	32	1	84
(% of 2)	(1.15%)	(0.36%)	(0.13%)	(0.60%)
(% of 3)	(0.11%)	(0.06%)	(0.06%)	(0.09%)
2. Social Services	4,453	8,851	751	14,035
3. Total Plan	47,250	48,600	1,650	97,500

In view of the repeated emphasis laid, within the country and internationally on the antiquity, variety and synthesis in our culture, the Steering Group recommends that the minimum reasonable outlay in the Seventh Plan on Art & culture should be raised to a modest 2% of total plan on social services.

1.14 It will be pertinent to observe that the criterion for plan allocation should be importance and justification of the programme rather than its relationship to the financial allocations in the Sixth Plan. It is suggested that while the schemes initiated in the Sixth Plan by the cultural institutions and the ongoing programmes of the Department of Culture might continue with adequate step up in outlay, new schemes have been proposed to meet crucial challenges in the sectors of Art & Culture. These have been discussed under the sectoral recommendations. It is suggested that State/UT Governments should not divert funds from cultural sector to non-cultural sectors. Further, a minimum of 1/2 to 1 per cent of the plan provision be earmarked for preservation and promotion of cultural heritage in other development sectors e.g., Rural Integrated Development, Tourism, Health, Urban Development, Industrial development, Handicrafts, etc. State Governments should also adopt similar pattern.

PART II - SECTORAL RECOMMENDATIONS

2.1 The programmes under Art & Culture can be conveniently grouped under the following sub-sectors:

- I. Archaeology
- II. Museums & Conservation Laboratories
- III. Anthropology and Ethnology
- IV. Archives & Records
- V. Institutions of Tibetan, Buddhist and Historical Studies
- VI. Libraries including Rural and Manuscript Libraries.
- VII. Academics for promotion of performing Literary and Plastic Arts.
- VIII. Promotion & Dissemination of Culture.
- IX. External Relations.

I. ARCHAEOLOGY

3.1 The Archaeological Survey of India, which was set-up more than hundred years ago, is engaged in exploration and excavation, preservation of monuments, epigraphical research and development of museums. The Survey is maintaining nearly 5000 centrally protected monuments and Archaeological Sites of national importance under Ancient Monuments and Archaeological Sites & Remains Act, 1958. The number is increasing every year.

3.2 During the past few years there has been phenomenal increase in the functions and responsibilities of the survey. Survey is also facing many new problems, viz., (i) vandalism at monuments and theft and smuggling of antiquities, (ii) misuse of monuments and (iii) unauthorised encroachments in the archaeological area, etc.

3.3 Realising the fact that ASI is overburdened with the existing responsibility of maintaining several thousand monuments all over the country, the Steering Group suggests reorganisation of circles and augmentation of circles from 12 to 18 so as to effectively manage them and to undertake programmes of their preservation and security.

3.4 There is urgent need to strengthen the epigraphy Branch so that a large number of estampages which are pending for the past many decades could be properly deciphered and their publication taken up. Under the publications programme of the Survey, adequate funds may be specially earmarked for publication of estampages in the Epigraphical Department.

3.5 As regards setting up of Institute of Archaeology, it was observed that this institution may be set up under the umbrella of the ASI at the initial stage and develop into an autonomous body in due course to cover the entire gamut of Archaeology including academic research in the universities. Efforts should be made to institute chairs for Regional Asian Archaeology in different universities, e.g. Chinese, South East Asia, West Asia, Japanese, Central Asian, etc.

3.6 The Steering Group took serious note of the security staff position which called for immediate improvement both in quantity and quality. It was noted that the present strength of Monument Attendants was nearly 2700 which meant that not even one attendant is available for each protected monument and site. In order to prevent vandalism on the protected monuments, sufficient trained watch-and-ward staff needs to be provided at all monuments. ASI should make arrangements for the training of the security force by military and para military organisation and adequate funds should be provided for this purpose in the plan.

3.7 Similar arrangements will be desirable in States and Union Territories. If a State Archaeology Department does not have adequate strength of security staff, there can be single security force for all cultural properties. In the fields of archaeology, States/UTs should provide a minimum of fifty percent of the total outlay on Art & Culture in their plans.

II MUSEUMS AND CONSERVATION LABORATORIES

Art Collections:

4.1 Adequate funds should be provided to museums in order to enrich their collections of Indian art and, at the same time, encouragement should be given to acquire works of international art.

4.2 Customs duty on import of works of art should be waived. Export of masterpieces of ancient Indian art and important works by famous foreign and Indian artists, less than 100 years old, but declared as Art Treasures should be checked, and so also that of specific works by living artists which are of extraordinary historical and artistic importance. Non lapsable funds should be established to ensure acquisition of best works of art as and when available, and existing tax laws may be amended as and when necessary.

Documentation:

4.3 Computerised photo documentation of works of art in all major museums and their indexing and cross-indexing should be given priority, to be followed by publication of catalogues of collections. To minimise the loss of photo, video or computerised visual records of exhibits, sets of such documents should also be stored in more than one place.

Security:

4.4 Security arrangements for works of art as well as that of the buildings and premises of museums are antiquated. For security of art objects computerised burglary and fire-alarm system should be introduced, environmental conditions inside the museums should be improved to minimise the danger of decay of works of art and due to inadequate storage system, mishandling and sheer carelessness. Adequate trained staff equipped with latest mechanical aids such as walkie-talkie system etc. and working in collaboration with police authorities should be provided.

Display and maintenance:

4.5 Normally, maintenance of museums is under Non-Plan and looked after by CPWD, and State PWDs, often leading to very shabby results. As and when necessary, provision for special repair and maintenance should be kept in the plan budget to augment Non-Plan provisions. The interior should be maintained by the museum itself.

4.6 Installations, such as improvement of lighting system and preparation of show-cases etc. could be designed in consultation with professional private and public agencies, using latest available material, and atleast a part of the museum should be centrally airconditioned for the storage, preservation and display of fragile objects.

Special Exhibitions:

4.7 Special exhibitions of works of art from the reserve collection, ensuring regional collaboration by way of exchange of exhibits, and taking full advantage of international cultural exchange programmes should be encouraged. For handling of masterpieces and for their loading and unloading and packing, adequate expertise should be ensured by providing training facilities as and when necessary. The department of Exhibition within Museums should work in collaboration with the Restoration, Education and Publication Departments.

Education

4.8 To ensure the role of museums in the field of education they should be linked with educational institutions. Students visual exposure to works of art may be made compulsory, involving not only a mere gallery visit, but also lectures and demonstration in the museums, using audio-visual facilities and showing of films etc. Every museum should have an active Mobile Exhibitions Bus Programme so that museums could send exhibitions to adjoining smaller educational institutions, villages and small fairs.

4.9 At a higher level, museums should be declared as educational institutions so that they could impart teaching in specialised areas, and there should be an active inter-action and linkage with the University set up. Major museums should be encouraged to develop atleast a part-time educational and lecture programme leading to awarding of certificates.

4.10 The educational programmes of museums should be linked with their publication programmes, so that required inexpensive or subsidised educational material could be made available to the public.

4.11 In addition, museums should collaborate and take advantage of means of mass communication, such as radio, television and documentary films.

Publications:

4.12 Besides publications of books and catalogues, equal importance should be given for preparation and selling of colour slides, a large scale publication of picture post cards, reproductions of works of art and art educational items such as jigsaw-puzzle etc. especially for the benefit of children.

4.13 Above all, every attention should be made to improve the quality of publications, augmenting museum resources by evolving an active collaboration with other commercial and business agencies, both in public and private sectors.

Museum and the Public and Museum Personnel:

4.14 Every attempt should be made to evolve ways and means to involve the public in the patronage of museums. At a higher level, Societies of the Friends of the Museums should be formed -- providing some financial assistance at the initial stage -- with a view to attract public support to the museum, taking advantage of existing tax laws and their possible modification in future.

4.15 Working conditions of museums employees should be improved, administrative and financial rules governing museums works should be re-examined, transfer of administrative, ministerial and curatorial staff should be introduced among museums controlled by the Centre, and preferably at the State level also.

4.16 Museums should also be covered under Essential Services Act, specially since the security of art treasures is in danger.

Regional Museums of Modern Art:

4.17 For the promotion, improvement and qualitative results, the Steering Group recommends that the National Gallery of Modern Art should set up its branches in large cities such as Calcutta, Madras and Bangalore etc.

History of Art

4.18 The Steering Group noted that an Institute of History of Art is being set up, as per the scheme submitted by the National Gallery of Modern Art which has already started teaching programme in important areas of Western Art, International Modern Art and their sources. It should be extended, inviting participation of other major institutions such as the National Museum and the Archaeological Survey of India.

4.19 It is also suggested that Universities should be encouraged to open Departments of History of Art, emphasising teaching at the under-graduate level.

4.20 Other major museums such as Salar Jung Museum, Hyderabad, Indian Museum, Calcutta, Madras Museum, Madras and Prince of Wales Museum, Bombay etc. should be encouraged to impart teaching of History of Art in highly specialised areas.

Central Assistance to State Museums

4.21 The recommendations made in the above paragraphs are in respect of Central Museums, State Museums as well as Museums maintained by Universities, Statutory Bodies, other organisations and private persons.

4.22 While plan provisions under the Central Sector should be adequate for all the measures mentioned above in the Central Museum,

the Steering Group specifically recommends that besides provision in the States Plan there should be a Central Scheme for direct Central Assistance to State Museums for improvement in storage system, better security by installation of Microwave Burglary and Fire Alarm System, Central Air-conditioning of atleast a portion of a museum and to improve the existing Conservation Laboratories or to set up new ones where they do not exist.

Conservation Laboratories

4.23 The problems of conservation are far too complex as far as the works of art of Indian origin are concerned. Out of about 400 museums in the country, hardly 25 could be considered as having some sort of conservation laboratory and only half a dozen museums could claim to have reasonably equipped laboratories.

4.24 Therefore, the Steering Group recommends that every important State level museum must have conservation laboratory, to be further supplemented by setting up of Regional Laboratories, functioning in collaboration with National Laboratory to ensure an up-to-date administrative and technical set-up.

4.25 Universities should also be encouraged to start the department of Conservation and Restoration to impart education at the M.Sc. level. This should be further augmented by arranging short-term Certificate courses by the State Museums Laboratories.

4.26 For better administrative and technical coordination, a Central Advisory Committee should be formed to plan and supervise setting up of new laboratories, to determine the quantum of financial assistance, to provide up-to-date technical equipment, and to ensure such conditions as may be required to facilitate training of candidates on a large scale.

Restoration of Oil Paintings:

4.27 The Steering Group noted that whereas there are thousands of oil paintings available in India which need immediate restoration the country hardly has six to eight trained restorers. If this pace is not changed, even a period of hundred years will not be enough to do the needful.

4.28 Therefore, setting up of technical laboratories and training of candidates should be given top priority.

4.29 The Restoration Laboratory of the National Gallery of Modern Art should be declared as the national Laboratory where highly specialised teaching at the M.Sc. and Ph.d. level could be imparted. Other national museums and institutions such as the Archaeological Survey of India and National Research and Conservation Laboratory etc. should have attached wings for the restoration of oil paintings.

Science Museums

4.30 The Steering Group would also stress on the need for setting up Science Museums/Centres in the country for creating scientific temper amongst the people, supplementing science education in schools, disseminating science and technology for rural development and for cultivating creative talent amongst younger generation in particular.

Other recommendations

4.31 The Steering Group further recommends that:

- There should be a museum of contemporary art (folk, tribal as well as modern) at each State headquarters. There may even be independent museums for the works of individual Artists.
- Local bodies in India should be asked to set up museums and galleries as is done in the West.
- Besides the State headquarters, there should be museums at smaller places also, e.g. in District, Sub-division and Panchayat headquarters. At the Panchayat level, museums could be located in a room in the Panchayat building.

III ANTHROPOLOGY AND ETHNOLOGY

5.1 The Anthropological Survey of India is the apex body at national level in the field of anthropology. It conducts fundamental and applied research in anthropology and allied fields, publishes the results of researches, acts as a clearing house, maintains anthropological museums, libraries, etc. While the ongoing programmes of studies, surveys, documentation and development of museums of the Anthropological Survey of India should be continued, the scientific and administrative infrastructure needs to be strengthened including creation of Regional and Sub-Regional offices. It was suggested that a Centre for Advanced Study in anthropology may be set up which may act as a centre of excellence and a model for training and research institutions. The proposed centre may be an autonomous body with proper links with universities. The Steering Group also felt that books on anthropology should be suitably revised to reflect national thinking.

The situation in the States both in the matter of infrastructure and financing

5.2 There is no institution comparable to the Anthropological Survey of India in the field of anthropology at the State level. The importance of anthropology for formulation and implementation of action programmes for the masses is yet to be fully appreciated. Some States have, however, established centres for conducting research among the tribal people. The Tribal Research Institute at Bhubaneswar in Orissa, the Tribal Research Institute at Ranchi in Bihar, the

Cultural research Institute at Calcutta in West Bengal may be cited as examples. With regard to manpower position and financial resources, no uniform pattern is discernible at the State level. Their efforts are mainly directed to conduct investigations among particular tribes inhabiting the States and bring out ethnographic accounts. The non-tribal castes and communities which constitute the bulk of the population remain by and large uncovered.

Guidelines to be given to State Governments for formulation of their 7th Five Year Plan

5.3 (1) The States should give due emphasis in their 7th Plans not only to cultural anthropology but to physical anthropology as well. This holistic approach is essential for making any objective assessment of the living conditions of the people, for determining temporal trends, and for similar other problems. Investigations into economic aspects of life, religion, language, etc. may be supplemented by investigations on growth and development of children, ageing, dietary habits, nutritional stress and adaptation, fertility, mortality and morbidity, indigenous health practices, and the like.

(2) As a result of external contacts and modernization some of the tribes are gradually losing their skill in particular arts and crafts, their knowledge in traditional medicines and cures, etc. In such circumstances, the States may be requested to accord priority to researches in 'urgent anthropology' or 'salvage anthropology'.

(3) In order to avoid repetition of investigations on the same or essentially same topics, the State authorities may like to consult the Anthropological Survey of India about the feasibility of including particular schemes/investigations relating to anthropology or tribal affairs in their 7th Plan whenever necessary.

(4) Furthermore, the Tribal Research Institutes should play a significant role in the formulation and implementation of tribal development and welfare programmes in the States at the grassroots level.

Ethnology

5.4 In a multi-ethnic, multi-cultural and multi-linguistic country like India, where the majority of the population inhabit the rural areas, the National Museum of Man alone cannot fulfil the role of public education satisfactorily. It is, therefore, suggested that regional ethnological museums may be set up in the 7th Plan for presenting the regional picture in their respective regions to serve as feeder museums to the Central Museum.

IV - ARCHIVES & RECORDS

- 6.1 The Group strongly recommends the urgent need for early enactment of a Public Records Act. A well defined and detailed plan for proper records management within the record creating agencies as also the use of standard quality paper for files of lasting value is very essential. Departmental Record Rooms of both Central and State Governments, which are to play a pivotal role in improving the state of records, should be established on modern lines and manned by properly qualified personnel. Financial provisions for this purpose should be made in their sectoral budgets. Considering the demand of records creating agencies and developmental programmes in the field of Archives, the school of Archival Studies of the National Archives of India needs strengthening so as to provide exhaustive training and consultancy services in records administration and management, conservation and reprography. Fellowships scheme is to be introduced to promote academic research work and to augment training facilities.
- 6.2 The present holdings of the National Archives of India will be doubled with the immediate acquisition of over 140 million folios of non-current records of central ministries. This will need strengthening of the Repository as well as the Research facilities.
- 6.3 Immediate and adequate support should be provided to our archives for modernising and expanding records management preservation and reprographic services with the help of modern technology. For prompt supply of records to reprographic and restoration wings, a Feeder Unit is to be established both at the Central and State Level.
- 6.4 Location, salvaging and rehabilitation needs of records lying scattered in public and private agencies need to be attended to on priority basis so that our social and cultural documentary heritage is kept intact. Archival consciousness among the public has to be created to facilitate search of such collection of manuscripts in private custody.
- 6.5 Security microfilming of invaluable Government records and microfilming of records and manuscripts of national importance in private custody need strengthening. The technique of Automatic Data Processing for quick computer assisted retrieval of information is to be introduced which will entail not only acquiring of sophisticated equipment but training of staff in handling these machines.
- 6.6 A systematic effort is also to be made in acquiring microfilm copies of records relevant to India that are available in the archives of foreign countries.
- 6.7 State/Union Territories Governments should also provide adequate funds and facilities for establishing conservation laboratories in the State Archives and Libraries.
- 6.8 To monitor the pace of development of archives both at the Centre and States level, under various plan schemes, a planning cell needs to be set up both at the Centre and State level.

V. INSTITUTIONS OF TIBETAN, BUDDHIST AND HISTORICAL STUDIES

7.1 For promotion of Tibetan and Buddhist Studies, four National Institutions were established, viz.

- (i) Central Institute of Higher Tibetan Studies, Sarnath (Varanasi);
- (ii) The Central Institute of Buddhist Studies, Lh.
- (iii) Sikkim Research Institute of Tibetology, Gangtok; and
- (iv) Library of Tibetan Works and Archives, Dharmasala.

7.2 A special importance was given to the work of Nav Nalanda Mahavihara, an institution assisted by the State Government of Bihar. Huen-Tsang Memorial was constituted by the Department with a view to establish an institution. The Steering Group recommends the merger of these two institutions for integrated development in the VIIIth Plan.

7.3 It also endorses the recommendations of the National Advisory Board for Promotion of Buddhist Studies which has been set up by the Department of Culture.

7.4 Some of the important recommendations that need to be implemented in the 7th Five Year Plan are:-

(i) Training and Teaching

Steps may be taken to bring uniformity in the syllabi of Buddhist and pali courses of different Universities. There is also need for proper restoration and preservation of Buddhist manuscripts and religious scriptures. Two important related aspects i.e., the role of the Monasteries and unattached scholars should also be considered by the organisations like Monasteries. These will play a role in the overall programmes of teaching and training in Buddhist studies. The scholars who are not attached either to the UGC system or to the Department of Culture organisations or even to institutions such as Monasteries but are doing useful work in that field should also be brought within the scope of this programme. For this purpose there is a need for instituting of three types of fellowships of Rs. 2,000/-, Rs. 1,000/- and Rs. 600/- per month for conducting research in all aspects of Buddhist Studies.

(ii) Research and Restoration

A scheme for Restoration of Buddhist text not available in Sanskrit and in pali may be launched during the 7th Plan and the entire work under the scheme may be done through the four institutions, namely,

- (i) Central Institute of Higher Tibetan Studies, Sarnath,
- (ii) Central Institute of Buddhist Studies, Lh.,

- (iii) Sikkim Research Institute of Tibetology, Gangtok, and
- (iv) Library of tibetan Works and Archives, Dharamsala, which are either fully or partly financed by the Department of Culture. One of the Institutions should act as co-ordinator. These institutions should employ Research scholars and such other persons on project-wise contract basis.

(iii) Publications

The scheme for publication and cataloguing is to be started. The Manuscripts should be brought out which are out of print, at present. Some grants are to be given for implementing the activities pertaining to the work of preparing work indices and the publications which were brought out during 1958-59 (at the time of Buddha Jayanti).

(iv) Exchange of Scholars

For establishing association with other countries having rich treasure of Buddhist literature, suitable programmes on long term basis for the institutions and scholars who are engaged in research in Buddhist studies should be formulated. Possibilities of earmarking some scholarships for Buddhist Studies under the Cultural Exchange Programmes with countries like USSR, FRG etc. may be explored.

(v) Schemes may be evolved for supporting institutions working in these fields and implementing the recommendations of the National Advisory board of Buddhist Studies as also the International Conference of Buddhist Studies held recently in India.

VI. PROMOTION AND DISSEMINATION OF CULTURE

8.1 Promotion and dissemination of Culture requires a comprehensive approach of both strengthening existing institutions establishing some others as also permeating other fields of disciplines, especially those of education, rural integrated development, small scale industry, tourism etc. So far the Government of India's efforts have been largely restricted to the fostering of national institutions in the fields of creativity, especially the arts. With this view the three Akademies of the Literacy, performing and plastic Arts were established in addition the National School of Drama received an independent status. The other institutions concerned which have been established, have been charged with the duty of inculcating a sense of value and of bringing the message of national integration to urban as also rural audiences. In this sphere, very valuable work has been done by the Centre for Cultural Resources and Training which has been conducting orientation and refresher courses and workshops for teachers. This is a practical demonstration of new design of education and could well be emulated of other courses. The Steering Group strongly supported the schemes launched by the Centre and

recommended the following of this model by others. The Gandhi Darshan and the Gandhi Smriti, (the latter now under the Department of culture) have played a valuable role but can play a much more fundamental role in concretising the ideals and the ideas of national leaders of India. Their vision of India where a catholicity of sects, cults would be fundamental and integration indispensable could be made a reality.

8.2 Financial allocations for such institutions who can play a role in inter-linking and promoting integration are necessary. The Steering Group made two broad recommendations, (1) support and larger allocations to schemes already launched such as (i) building grants, (ii) grants to theatre ensembles, (iii) cultural organisations, (iv) assistance to voluntary organisations etc. and (2) special efforts for supporting both institutions and programmes of inter-linking of the sectors of education and culture.

8.3 Two areas which were highlighted by members of the Steering Group related to the development of folk and tribal arts, especially those folk & tribal arts which are threatened to extinction. Special mention was made of the need for salvage operation in the Himalayan region and other regions which are threatened ecologically as also culturally. The second area was the need for documentation of the unique oral traditions and restoration studies of the Shastras.

8.4 The need for documentation of rich oral traditions and restoration of traditional studies of Shastras connected with fine arts is also stressed. It is, therefore, proposed to undertake a major scheme in the Seventh Plan for documentation of oral traditions both Shastric and Laukik (classical and folk).

8.5 The need for promoting childrens literature on Art and Culture was also emphasised and it is suggested that the National Book Trust might consider giving coverage to these themes in its publication programme for children. The government museums should also bring out special subsidised publications for children.

8.6 All the High/Higher Secondary Schools in the country must be provided with several framed reproductions of classical, folk and contemporary paintings, so that school children become aware of the pictorial arts of the country.

8.7 The Steering Group recommended that suitable financial outlays should be made for the support and strengthening of the institutions both in the arts as also those working in the field of inter-linking and special allocations for documentation and preservation work both of the folk & tribal traditions as also the Shastric tradition.

VII - AKADEMIS FOR PROMOTION OF PERFORMING, LITERARY AND PLASTIC ARTS

9.1 The Steering Group is of the view that existing financial provisions for Central Akademies are very inadequate and should be increased. A strong plea has been made in this Group for the

promotion of creative activities in the field of art and culture particularly in rural areas which are not fully covered by the various schemes. The group, therefore, recommends that adequate arrangements should be made for providing space for theatres and stage performances and also for organising exhibition in rural areas.

9.2 For preservation conservation and dissemination of Culture, greater emphasis has to be laid on strengthening of the national institutions especially the Sahitya Akademi, Sangeet Natak Akademi, Lalit Kala Akademi and the National School of Drama. Assistance should also be provided to the Voluntary Organisations working in this field. Similar strengthening of State/UT Akademis is also essential.

VIII - EXTERNAL RELATIONS

10.1 The Steering Group observed that although the Government of India has launched a programme of International Cultural Relations from early fifties it was a pity that there had been no long term sustained projects as part of its cultural exchange programmes. Despite the 74 Cultural Agreements and the extensive cultural exchange programmes which have been administered by the Department of Culture, there was need for setting up of a Centre of South East Asian Studies. It was observed that this recommendation had been made in the 6th Plan but had not taken off. The Steering Group strongly recommended the revival of these schemes and their implementation.

10.2 It is proposed to launch regional studies specially in South East Asia region and Africa in selected areas of Culture. These projects will be implemented through the existing national institutions or through group projects.

LINKAGES AND COORDINATION BETWEEN
CULTURE AND OTHER SECTORS

Some serious efforts have been made from time to time for integration of Cultural action with other developmental sectors, especially those of tribal and rural development, communication, tourism, formal and non-formal education and urban industrial development.

However, the first and foremost need is to modify the formal system of education. Activities and functions requiring variety of manual and other skills found in the immediate society can be powerful tool of attunement to the cultural environment and ensuring attainment. Logically a model of education evolved for an urban elite dissociated from rural India could not be adopted for the whole of India. Instead it is advisable to devise multiple models by drawing upon the rich resources of the indigenous traditions still operative at the tribal and rural level. Further educational development must take note of the fact that those who were socio-economically backward are culturally rich and that they must be structurally involved in the school system.

Taking the two realities, namely, the reality of Indian society which could be divided into the tribal rural, maffasil towns, and urban levels and of a very distinct regional or even local identify, educational strategies could be re-oriented to take education to the existing cultural and community centres at the tribal and rural level rather than the population being taken out of their agricultural activity into an insulated school situation, which largely or invariably has led to alienation.

At the tribal level although the institutions are fast diminishing, there is the very important structure of the communal dormitory system known as the Ghowul in Maria and Muria tribes, the Dhamukuris amongst the Hos, Orans and Santhala and the Morung among the Naga Tribes. Wherever this community institution exists, it should not be disrupted; instead the input of literacy and education and social awareness of their rights and responsibilities in a democracy can be brought into the existing indigenous social structures. In fact, the dormitory as cultural, educational and productivity centres provides a model which could be suitably adjusted to suit contemporary needs. The same natural institutional identification could be done at rural/agricultural levels. The cultural component at this level is integral to life style. The educational strategies should develop curricula around these socially productive activities, all vehicles of developing community harmony and sense of cohesiveness.

The largest segment of Indian population belong to rural India where the agricultural cycle is of the utmost importance both in socio-economic terms and in cultural terms. The annual agricultural cycle gives rise to an infinite plurality and multiplicity of cultural manifestation. Educational curricula at this second level should take

into account this annual agricultural cycle which is prevalent in different parts of India and should consider agriculture not merely as an economically productive activity but also use it for developing educational curricula.

Wherever animal husbandry or dairy occupation is central to the rural community, the curricula should be built around the lifecycle of the animal. In short, this would invariably make the one teacher village school draw upon the existing knowledge and skills resources of the community. The students should be involved in the agricultural cycle both because of its productivity aspect and its educational and cultural value. Annual and seasonal festivals coincide with the particular cycle of crop of the area whether wheat or rice or coconut or sugarcane or bamboo etc. These crops of the area, the ecological situation and the natural resources of the area should be axis around which education curricula should be developed. This would immediately lead to an attunement to and not an alienation from the environment. Many village schools are one-teacher schools. It should be possible for these schools to bring in persons with special abilities into the school system. One way of involving the community and drawing upon the existing resources, human and technical in the village school is to open more schools in the natural cultural/craft centres in each village in India. The craftsman of the village provides a natural cultural and productive centre and he should be utilised to the maximum. Wherever a local performing art tradition is active, it should be brought into the school environment. The centres of pottery, weaving, blacksmithing, copper work, etc. should be utilised fully. The opening of new schools in the craft centre of the village or adding a school to the craft centre are advisable. The latter would have the added advantage of breaking the caste and class barriers because many persons who are skilled in these crafts belong largely to Scheduled Castes or Scheduled Tribes.

Since the craft centre are the natural productivity centres of the village, the strategy should also meet the goals of making education more productivity oriented. Naturally, the educational institutions can become centres of culture and aesthetic expression.

In course of time this craft-centre school may become a special type of school which is neither in opposition nor is in competition with the conventional model of a school of the formal system. It is necessary to stress that the schools which may be opened in craft centres which may revolve round the natural cultural centres of the community should not in any way be considered inferior or less in status than the formal schools.

The third level is the mufasil school or the semi-urban school where the formal system of education is largely operative, and the bulk of the middle-class goes to these schools. At this level, it should be admitted that a dissociation takes place between life functions and educational activity or cultural expression. No longer is this class of persons directly involved with the agricultural cycle or in the production of crafts. At this level it is necessary to incorporate consciously a cultural component into the different subjects of the curricula. For this purpose also it is necessary to

take into account the existing environment, the living traditions of arts and crafts in that environment and to bring in consciously a component which could be called 'work experience' or socially useful productive work. At this level, efforts may be made to draw upon the human resources of the community who are largely repositories of professional craftsmen e.g., brass workers, glass workers etc. or those preserving the oral traditions. Invariably the Kathakar, the Ballad Singer or another type of traditional teacher may be popular. The educational system should make use of these human resources. The first requirement at that level is to train teachers whether at the primary or the secondary level who can interact with and draw upon this expertise available with the group. An all-India programme of training teachers with a view to incorporating the cultural component in all the subjects they teach and the activities that they initiate in the schools is imperative.

Finally, at the urban or cosmopolitan level, is the fourth level, a further dissociation between life function and the 'educational' and cultural development is near total and the two are considered quite apart. At this level it is necessary to inculcate taste and discrimination consciously. This would require an educational strategy which would modify and change both curricula and the materials used in the school system. A close scrutiny of toys, games, puzzles, visuals, books etc. used in the urban school is essential. At this level also it is necessary to have a massive programme of orientation and refresher courses for teachers so as to integrate the cultural component into the entire fabric of the school system, so that education in schools does not become a tool of deculturation and alienation. A gradual programme or re-orientation is recommended for this centre.

In order to bring about any change in the existing educational system or in the incorporation of the cultural component at all levels of education particularly the school level, it is imperative to launch a scheme both at the centre and the State level for the reorientation of teacher. It is also necessary to prepare material which may be used by teachers in their institutions. For this purpose, it is necessary to develop a centre for the preparation of materials. So far the term 'cultural education' or 'art education' has been understood in its narrowest sense implying thereby only a drawing or a painting teachers, this definition needs change both in administrative and academic terms. For this purpose it is necessary to take certain administrative steps and also to examine the existing curricula of the colleges of art which are responsible for the training of the drawing and painting teachers which ultimately get absorbed in the educational system.

Inter-linking of educational/cultural goals with programmes of tribal and rural development are necessary. A review of the present state of tribal and rural society and the several recommendations/programmes of welfare developmental programmes makes it clear that in the field of education and culture, there is unfortunately a tacit assumption that cultural development could be possible only by a flow from the cities to the tribal areas. Nothing could be farther than the reality, in fact it is necessary to always remember that in India

there have been a two-way traffic between tribal, rural and city traditions, each complementing the other rather than a pyramidal structure where movements have flowed from city centres to rural and tribal cultural complexes.

Time and again, national leaders and P.M. have voiced that need to break away from the Macaulayan system or what may be called a fixed model system which aims at standardization. The paradox of education or the institution of educating being a tool of culture and it, in fact, being the chief vehicle of de-culturization had to be squarely faced. Grass root level field workers also have repeatedly asserted that at the tribal level and possibly also at rural levels the very moment of schooling-formal or informal is the movement of up-rooting of the individual from his cultural moorings. This has been responsible for a major schism in Indian society. A cultural planning for these levels of society which in turn will effect a national cultural policy must take this fact into account along with the institutions of education which become tools for alienation and deculturization. There is the inevitable and inescapable influence of city culture through mass media, marketing, building programmes, roads etc. So far there has been no inter-linking between developmental programmes which aim at economic progress and cultural and educational programmes. Indeed there has been no policy, there have only been ad-hoc programmes and sporadic attempts at organising festivals, fairs and so on. While influences from the city and all other aspects of modern life are inevitable, there is a case for safe-guarding against vulgarization and corruption which appear also as an inevitable concomitant.

It is necessary to have a clear policy which would foster a cohesive programme of work in developmental sectors such as roads, construction programmes, bridges, water, sanitation, handicrafts, implements, tribal and rural technologies and, of course, education.

The Steering Group noted that the entire gamut of activities relating to culture are not necessarily handled by Department of Culture alone. More often the activities are spread over the Departments of Education, Culture, Tourism, Handicrafts, Industries, Information, Rural Development etc. For administrative reasons, it may not be possible to bring all the cultural institutions at the Central and State levels under one roof. It is suggested that a coordinating body may be set up both at the Centre and in each State wherein all the Departments could meet together and take a comprehensive and integrated view of the programmes severally undertaken. This is particularly necessary in areas like Archaeology, Archives, Libraries as well as Museums.

The areas which require immediate and urgent attention of inter-linking through the university system as also the traditional system are:-

(i) Study of extinct scripts and languages

Presently many scripts cannot be deciphered or there are only a handful of scholars who can decipher these scripts. These include Ahom, Buraichi and to a lesser degree Modi, some forms of Grantha etc. There is an urgent need to associate young scholars with the few people who can decipher these scripts. Lakhs of manuscripts lie undeciphered on account of the lack of expertise.

(ii) Association of younger scholars with expert epigraphists and Numismatists. Despite the invaluable work done by the Department of Epigraphy of the Archaeological Survey of India and the work of great epigraphists such as D.C. Sircar, Dr. Chhabra and others, there is a crying need of epigraphists personnel. There are 80,000 estampages lying in the Epigraphical Department awaiting decipherment. No study of Indian History can be completed unless these written resources are tapped.

(iii) A building of expertise in classical languages both Indian and foreign:

There was a time when India produced world's greatest scholars in Avesta, even Greek and Latin, and linguists such as Sunita Kumar Chatterjee. The low priorities given in the University system has resulted in an absence of internationally known sinologists, indigenous studies experts and Greek or Roman studies experts.

(iv) The fourth and the most important area is the urgent need for both scientific documentation as also sustenance through an apprenticeship programme of oral traditions, Vedic Classical languages, Arabic, Persian, Pali and medieval Indian languages like Avadhi, Braj, etc. Many forms of recitations are becoming extinct. A proper documentation and a programme of support so as to ensure continuity of oral traditions going back to 2500 years should be launched within the University system or related to the cultural institutions.

(v) Despite Anthropological Survey of India's work and the work of some of the Departments of Anthropology in the university system not enough attention has been given to study of the rich tribal and rural artistic heritage of India. There are not multi-disciplinary Departments in the Universities, no research programmes which look at the totality of life-style in its dimensions of artistic manifestations and no relationship exists between the work of the Anthropological Survey of India, its studies and programmes and policies of Departments of Tribal Development in the Ministry of Home Affairs and elsewhere. Tribal, Folk and rural art have largely become a matter of ceremonial occasions and not that of sustenance and development at the local level when it is related to the daily routine of life. The Universities can play a very important role in this matter.

Similarly, for linking the activities of the Department of Culture with the Departments of Tourism, Rural Development, Tribal Welfare, Information & Broad-casting, Handicrafts & Handlooms, Town

Planning etc., Inter-ministerial committee may be set up for greater cultural input in the respective sectors.

In view of the increasing awareness of Indian culture abroad as a result of implementation of the cultural exchange programmes and agreements, there has been a noticeable impact of musical/dance performances, exhibitions etc. It is necessary that for promotion of external cultural relations a coordination committee may be set up consisting of the representatives of the Department of Culture and the Ministry of External Affairs.

Keeping in view of the recommendations for linking of education effectively with culture covering the level of education as also the formal and non-formal system of education and other developmental agencies the Steering Group recommended an ad-hoc allocation of a minimum of Rs. 50 lakhs for setting up a co-ordinating machinery to over-look and plan such inter-linking and to undertake model experimental schemes which would serve as a model for others. This recommendation is necessary in order to concretise the suggestion made by especially in paragraph 12.15.

COLLECTION OF CULTURAL STATISTICS

At present there is no organised attempt both at the Central and State level to collect and publish cultural statistics. It may not be possible to collect the entire data of a vast country like ours of every activity that is undertaken. Any system of data or statistical collection could be undertaken only with the specific objectives in view and prepare selective data that could cover:

- (i) Data on the number of monuments conserved and new monuments that are discovered and their preservation. For this purpose the State and UT Governments may be requested to have a uniform pattern of reporting.
- (ii) Subjects of research and number of thesis which are submitted in the various areas of art and culture.
- (iii) Number of artists, number of productions in schools of Fine Arts and their disposal and the number of exhibitions organised.
- (iv) Any original publication or treatises made by the members or the faculty of the Institutions or non-governmental organisation/institution.
- (v) Number of objects of interest added to the Museum.
- (vi) Number of new original records added to archival institutions.
- (vii) Data on Libraries and their holdings.

Data will also be required on the number of students or participants in such activities, the number of scholars who availed themselves of the facilities. There could also be a compendium on the facilities available, the institutional set up, and their strength and weakness. It will also help discern activities of real promotional character which may merit further encouragement and support.

A beginning had to be made in this respect and at this stage it could be possible to a set proforma to ensure uniformity in reporting and also help collection of data. To the extent possible these proforma to be prescribed could be modelled on or dovetailed with the forms and returns already adopted and published by the UNESCO agencies for some countries should help integrate national statistics with world statistics.

For this purpose necessary machinery has to be created in the Seventh Plan both at the Centre and in the States.

FINANCIAL ESTIMATES FOR THE VIIITH FIVE YEAR PLAN ART AND CULTURE

In the context of the recommendations on Part I to III, the financial estimates for the Seventh Five Year Plan are as follows:

(Rs. in crores)			
Sub-Sector	Central Sector	States Sector	Total
1. Archaeology	40	60	100
2. Museums 75			
Anthropology 30	145	80	225
Ethnology etc.			
Archives & Records 40			
3. Tibetan & Buddhist Studies	10	2	12
4. Preservation, Conservation, Documentation, Dissemination and Promotion of culture including Akademis and Tribal and rural culture	80	40	120
5. External Relations	1	-	1
6. Inter sectoral and intra sectoral linkages	3	2	5
7. Direction and administration including monitoring	1	5	6
TOTAL	280	189	469

Assuming that the total 7th Plan outlay on Social Services, would be of the order of about Rs. 40,000 crores, as against the original 6th Plan outlay of Rs. 14,035 crores, the total financial outlays of Rs. 580 crores indicated above would mean that 1.4% of the outlay on all Social Services.

PERSPECTIVE OF DEVELOPMENT IN THE DECADE 1990-2000 AD

The recommendations of this Steering Group in parts I to IV above, if implemented through substantial step-up of outlay in continuing plan schemes carried over from the 6th and earlier Plans, and also through the introduction of some new schemes including construction programmes, would mean, in financial terms an outlay approximating only to a modest 2 per cent of the total outlay of Central State and UT governments on Social Services. It is expected that small percentage, once accepted for the 7th Plan, will form the basis for determining the financial outlay on Art and Culture during the decade 1990-2000 AD.

Financial outlay of these modest dimensions will, however, be depend not only upon the willingness of the Central Government to depend the activities of the cultural organisations under control and establish linkages between them and other central organisations in the fields of formal and informal education, agriculture and rural development, tribal welfare, handicrafts and village industries, information, broadcasting, television, cinema and other audio-visual media, etc. but also upon the states and Union Territories agreeing to largely follow the example of the Centre. To do this, the States and UTs have to considerably increase the percentage of Plan outlay from an existing level which is much lower proportionately to total outlay on Social Services than that of the central government (see para 1.18). The infrastructure which is lacking in many of the states, like a Department of Culture, a Directorate for public libraries etc., will perhaps be established during the 7th Plan, and so, more effective implementation can be expected in the years 1990-2000.

It is envisaged that in the decade following the 7th Plan the renewed emphasis on Preservation Documentation and Conservation of our rich and varied cultural heritage will continue to constitute the more important segment of governmental and government-sponsored activity. Growing pride in the national heritage will mean that archaeological sites, museums, archives, manuscript libraries, folk-lore and oral traditions, will all receive greater attention. However, it is hoped that this emphasis will not come in the way of a marked increase in encouragement of Contemporary Creativity, especially in areas of performing and plastic arts and creative writing spread through a more wide and efficient library system. Creative activity, no doubt, depends more upon public appreciation and support rather than upon state patronage. But it is expected that public taste and enthusiasm will be favourably influenced by greater exposure to the activities of cultural institutions supported by the state, and such exposure will, in turn, lead to greater demand for creativity of the right quality.

Private enterprise, in the form of impressaris, commercial art galleries, publishers and book sellers, is likely to play a more and more important role during the years following the 7th Five Year Plan.

The linkages proposed to be established in the 7th Plan between cultural organisations and other governmental organisations concerned with various aspects of economic and social life, are expected to grow stronger in the period 1990-2000; leading to elimination of the present association of ideas linking culture with leisurly pursuits of an elite and to the realisation that culture is a part of the life of every human being.

CHAPTER XIII

PHYSICAL EDUCATION, SPORTS & YOUTH SERVICES

Since the formulation of the Sixth Five-Year Plan (1980-85), the following new developments have taken place which have an important bearing on the formulation of the Seventh Five-Year Plan for the promotion of sports and games in the country.

- i) Adoption by the Government of India of the Resolution of the National Sports Policy.

The Government of India adopted recently, with the support of the State Governments, the Government Resolution on National Sports Policy and laid it on the Tables of the two Houses of Parliament on the 21st August, 1984. The policy statements embodied in the resolution, take the following factors into account:

- a) Importance of participation in sports and physical education activities for good health, a high degree of physical fitness, increase in individual productivity and its value as a means of beneficial recreation promoting social harmony and discipline;
- b) Recognition of the need of every citizen, irrespective of age and sex, to participate in and enjoy games, sports and recreational activities;
- c) Provision of the necessary sports facilities and infrastructure on a large scale to fulfil the need of every citizen recognised above;
- d) Recognition of the necessity of raising national standards in games and sport so that our sports-men and Women acquit themselves creditably in international sports competitions;
- e) Provision of facilities for spotting and nurturing, at a young age, talented boys and girls and to provide them coaching training and nutrition required to meet the necessity recognised above;
- f) Improvement and sustaining of sports consciousness amongst masses so that they are encouraged to participate in sports activities made possible by the above provision.

In order to make implementation of the provisions of the national sports policy a reality, the Resolution makes it the duty of the central and state governments to accord a very high priority to promotion of sports in the process of all round development.

- (ii) Creation of an independent Department of Sports in the Central Government

An independent Department of Sports was set up in the Government two years ago indicating the desire of the Government that the promotion of sports and games should receive special attention in the Central Government and that such promotion ought to be assigned an altogether higher priority in the process of national development as later clearly stated in the Resolution on National Sports Policy.

- (iii) Hosting of the IX Asian Games by India

The IX Asian Games were held in Delhi in a very successful manner and have created a very favourable climate for promotion of sports and games in the country and have generated a great deal of self-confidence in the matter of sports organisation within the country.

- (iv) Establishment of Sports Authority of India

The Sports Authority of India has been set up with wide powers to develop sports in the country and to manage infrastructure facilities created for Asiad 1982.

- (v) Finalisation by the National Development Council of the Approach in the Seventh Five Year Plan (1985-90)

Increase in productivity is one of the three main thrusts of the Seventh Five Year Plan according to the Approach Paper on human resources development.

2. The above then are the important developments which have taken place since the finalization of the Sixth Five-Year Plan for Sports and Games. These provide indicators in the light of which the Seventh Five year Plan for sports and games should be formulated and implemented. The Seventh Plan provides an immediate opportunity to implement the policy statements contained in the Resolution of National Sports Policy by expanding the continuing schemes and introducing new schemes during the Seventh Plan aimed at fulfilment of the objects of the national Sports Policy in a phased manner. Radically greater central investment in the promotion of sports and games would be required in the Seventh Plan as compared to the Sixth Five-Year Plan if even a beginning is to be made in the implementation of the National Sports Policy. The following factors are relevant in this context:

- i) Investments to be made in the Seventh Plan on the promotion of sports and games, including physical education, have to be consistent with the duty cast, inter-alia, on the central government to accord to sports and physical education a very high priority in the process of all round development;

- ii) Investment in the promotion of sports and physical education, being investment in health, fitness, individual productivity and social well-being of the people, is really for the upgradation of our human resources of development. Adequate investments for the promotion of sports and physical education are, therefore, needed to increase our individual and collective productivity;
- iii) Development of human resources can be considered to have various parameters such as education, health, nutrition, vocational training etc. One of the important parameters on which stress has not been laid so far is the improvement of physical efficiency of the individual which has a positive bearing on productivity in all walks of life. Participation in sports activities helps build not only greater physical efficiency but also those fighting qualities of the mind which propel the individual towards achievement and greater output.
- iv) Investments in the promotion of sports, physical education and youth activities in the preceding plans have been negligible. The allocations made in the Sixth Five Year Plan for the promotion of sports, physical education and youth activities should not, therefore, be taken as the base for considering allocations to be made in the Seventh Five Year Plan for these activities in the light of recently altered priority for sports.
- v) Investments proposed for the Seventh Five Year Plan in the field of sports and games take into account the likely constraints of resources on the Seventh Plan as a whole and represent, therefore, only the first phase of promotion of these activities which must go on for several plans until a plateau has been reached. The investment proposals are thus essentially modest.
- vi) In sum, adequate investment ought to be made in the Seventh Plan keeping in view the very high priority now attached for the first time to the promotion of sports and physical education, the thrust of the Approach Paper towards greater productivity and the urgent need to upgrade our human resources.

3. The thrust of the existing programmes has been on broad basing of our sports and games at the grassroots level. In our programmes for the Seventh Five Year Plan, the main thrust will continue to be on these very basics. However, attention is also proposed to be paid to raising of our standards in games and sports and on sporting and nurturing of talent through intensified and now coaching schemes. All this would imply:

- i) Creation of modest sports infrastructure of a utilitarian variety mainly at the grass-roots.

- ii) Strengthening of coaching and training arrangement both at the grass-roots and at advanced coaching centres including universities and colleges.
- iii) Schemes of promotion of sports for women in rural areas.
- iv) Schemes for talent search and nurturing the talent identified.
- v) Physical fitness programmes.
- vi) Providing assistance to national sports federation and sports clubs for the promotion of their activities.
- vii) Provision of modern track and field facilities on a regional basis.
- viii) Adoption of sports schools and setting up of sports hostels.
- ix) Research and development, particularly in the field of sports sciences.
- x) Schemes of sports scholarships for promising boys and girls and other talented sportsmen and women.
- xi) Schemes aimed at realisation of the concept of "Sports for All".
- xii) Provision of institutional support for the above activities.

Part I : CONTINUING SCHEMES

- i) Netaji Subhash National Institute of Sports and the National Coaching Scheme

The National Institute of Sports at Patiala directly and through its regional centres at Calcutta and Bangalore and by implementation of the Regional Coaching Scheme has been making significant contribution towards raising the standard of games and sports in the country and providing facilities for imparting advanced coaching in various games and sports. For the fulfilment of these purposes, it has been undertaking coaching activities through 25 regional coaching centres all over the country. It has been providing training and coaching to national teams in different sports disciplines. To make these activities possible, it has been producing coaches by running diploma courses both at Patiala and in its regional centres at Bangalore and Calcutta. It has also been creating infrastructure of international standards at Patiala and the regional centres so that advanced coaching can be imparted according to international standards. So far, it has produced over 6000 coaches by award of diplomas and over 8000 sports instructors through short-term certificate courses. The Institute at present has an authorised cadre strength of 750 coaches which are employed mainly in the regional coaching centres or are attached to Nehru Yuvak Kendras.

In the Seventh Five Year Plan, the Institute proposes to produce about 5000 additional qualified coaches. It proposes to employ about 1500 additional coaches in the regional coaching scheme, Nehru Yuvak Kendras and Field Stations and to increase the number of regional coaching centres from 25 to 100. The additional coaches are sought to be produced by covering the different regions of the country by establishment of 4 regional centres on the lines of the East Centre, Calcutta and South Centre at Bangalore and also to strengthen the two centres last named. The centres would also serve as nuclei in the regions for the highest calibre of coaching. To upgrade the sports standards in universities, it is proposed to establish 100 field stations with 5 coaches in each university. Besides, the institute proposes to strengthen the sports infrastructure at Patiala, Bangalore and Calcutta and to provide the necessary infrastructure in the new regional centres to be set up. The establishment of a High Altitude Training Centre, a Winter Sports Centre and a Water Sports Complex is also proposed. The Institute has already started a faculty of sports sciences consisting of 10 departments and it is proposed to strengthen these departments substantially during the Seventh Five Year Plan.

Besides these basic functions mentioned above, the Institute has also been assigned by the Government the responsibility of organising and running Rural Sports Tournaments, Women Sports Festival and the National Talent Search Scholarship Scheme.

ii) Grants to National Sports Federations

This scheme aims at providing financial assistance to autonomous national sports federations for financing coaching camps for preparation of national teams for international events, passage cost for the travel of national teams abroad, holding of international tournaments in India, organisation of national championships at the senior, junior and sub-junior levels, and also some grants for purchase of non-expendable equipment.

With increased tempo of sports activities in the country, it is proposed to substantially increase the Plan allocation for the provision of grants to the federations.

iii) Grants in States Sports Councils

This scheme is crucial to the broad-based of sports in the country and for involving an ever-increasing number of people in the sports activities at the grass-roots level. This scheme provides for assistance to State Governments and States Sports Councils on a matching basis for creation of utilitarian playfields, sports complexes and stadia in villages, towns and State capitals. It also includes holding of coaching camps for boys and girls at the State level, establishment and maintenance of Rural Sports Centres and purchase of sports equipment. This scheme is considered most vital for achieving the objects of the National Sports Policy and a very substantial increase has, therefore, been proposed in the Plan allocations.

iv) National Sports Organisation

This scheme aims at raising the standards of sports in universities and colleges. The three aspects of the scheme are - financial assistance to the UGC for creation of sports infrastructure in the universities and colleges, financial assistance to the Association of Indian Universities for providing coaching facilities to students and for holding tournaments at the college and university level and financial assistance to the National Institute of Sports for awarding Sports Scholarships to talented students.

Sports infrastructure in the universities and colleges at present is modest and the scheme has functioned very modestly so far. A notable increase in allocation for infrastructure is, therefore, proposed. Similarly, it is proposed to augment financial assistance for coaching and holding of tournaments as also for raising the number of sports scholarships being offered to students from 100 to 200 and their value from Rs.1200 to Rs.2400 per annum. Provision has been proposed accordingly.

Other Continuing Schemes

The following other continuing schemes are also proposed to be strengthened.

- i) Promotion of sports for women;
- ii) Exchange of sports experts and teams under bilateral exchange programmes with foreign countries,
- iii) National Physical Fitness Programme; and
- iv) Scheme of National sports Talent Search Scholarship. In particular, it is proposed to increase the number of national level scholarships from 400 to 500 and their value from Rs.900 to Rs.1200 per annum. Similarly, it is proposed to increase State level scholarships from 800 to 1200 and their value from Rs.600 to Rs.900 per annum.

Part II : NEW SCHEMES

i) Plan Schemes of Sports Authority of India

The Sports Authority of India has been set up in the last year of the Sixth Plan and its Plan activities will start from the Seventh Five Year Plan. It is intended that initially it should cover these areas of sports promotion which have not been attended to so far or have been attended to in a very marginal way such as spotting and nurturing of sports talent in the school system, realisation of the concept of "Sports for All" by making facilities available to the extent possible, for the public at large as distinct from high level competitors, provision of financial assistance to scholars to conduct research in sports sciences and the science of sports infrastructure,

creation of a central pool of sports equipment which can be loaned to institutions for holding tournaments, a concerted effort to promote sports consciousness and provision of buildings for its own use as a new organisation. In fulfilment of these programmes certain schemes have been proposed, the more important of which are mentioned below:

- i) Sports talent search contest for the very young (7 to 12 years)

This will take place in eight most popular sports. The winners in the contest will be provided a scholarship and will be eligible for admission in schools proposed to be adopted by SAI for special promotion of sports.

- ii) Adoption of Schools

SAI proposes to select 100 schools during the next five years which have most of the infrastructure already available, to provide each such school with a one-time grant of Rs. 5 lakhs for the completion of sports facilities, to bear expenses on providing three coaches in each such school and thus to promote spotting and nurturing of talent in such institutions. The winners of the sports talent search contest will be eligible for admission in these schools on a preferential basis.

- iii) Holding of National Physical Fitness Festivals

These festivals for the common man are proposed to be held in State capitals, the expenses being shared between the State Government concerned and SAI. The festivals will take place during a national physical fitness week to be organised by SAI and are expected to promote fitness consciousness. The target age groups will be 35 years and above.

- iv) Housing for Staff

The staff of Sports Authority of India is not entitled to Government accommodation and it would be necessary to develop a housing colony for the staff. A suitable provision for this purpose has been proposed.

- v) Fellowships for research in sports science, sports infrastructure and sports equipment

No such fellowships for the purposes mentioned above are available at present from any source. In view of this, SAI propose to offer 60 fellowships per annum of the value of Rs.2000 per month.

- vi) Recreation centres in metropolitan cities

It is proposed to set up two to three sports recreation centres for the general public in metropolitan cities during the Seventh Plan period. The states will either contribute the land or lease it out at a nominal rent. A suitable provision has been proposed for this purpose.

Other schemes of SAI include a central pool of technical sports equipment, promotion of sports like sailing, rowing, aerospports, equestrian and shooting, the initial equipment for which is expensive. These sports cannot be promoted without substantial initial investment. It is also proposed to set up one sports medical centre per State.

(2) Grants to voluntary sports clubs/organisations

Owing to high cost of equipment and cost of maintenance, neighbourhood clubs are fast dying out. Such clubs, however form the very basis of amateur sports. It is, therefore, proposed to provide bona fide neighbourhood sports clubs with financial assistance so that voluntary sports activity at the club level is resumed. To begin with a modest provision has been proposed in the Seventh Five Year Plan.

(3) Provision of synthetic track and astroturf for hockey fields one in each region

Modern competitive sports are being held increasingly on artificial surfaces. One such surface in the national capital is not enough and it is, therefore, proposed that in the Seventh Plan each for the six regions, east, north-east, west, north, south and central regions are provided with one synthetic track and one astro-turf surface. A suitable provision has accordingly been proposed.

(4) Sports Hostels

Sports hostels where set up have proved a great success. These enable boys and girls talented in sports to pursue their studies whether at the school or college level while at the same time receiving intensive coaching and care in such hostels. It is, therefore, proposed to set up 45 sports hostels as near as possible to the proposed NIS regional centres. Each hostel would have a capacity of 150 persons with a separate arrangements for boys and girls. Residence, board and lodge, coaching and sports kit would be provided free.

Other new schemes of the Department include SNIPES field stations for school students, travel grants to sports scholars for research abroad and strengthening of the administrative set up of the Department for implementing all the Plan schemes.

APPENDIX -- I

SPORTS AND GAMES : PROPOSED UTILAY FOR VII PLAN PERIOD (1985-1990)

(Rs. in lakhs)

Sl. No.	Name of Scheme	VI Plan Allocation	VI Plan Expenditure (Estimated)	VII Plan (1985) Outlay (Proposed)
I. Continuing Schemes				
1.	NSNIS Patiala and National Coaching Scheme	340	744	2800
2.	Grants to National Sports Federations	250	303	1000
3.	Grants to State Sports councils	300	317	13000
4.	National Sports Organisation	150	88	1275
5.	Promotion of Women Sports	15	12	50
6.	Exchanges in Sports/Physical Education under Bilateral Cultural Exchanges	20	19	50
7.	National Sports Talent Search Scholarships	Non-Plan Scheme		75
8.	National Physical Fitness Programme	Non-Plan Scheme		710
	Total Continuing Scheme	1075	1473	18960
II. New Schemes				
1.	Grants to Voluntary Sports Clubs/Organisations			500
2.	Laying of Synthetic Track and Astroturf - 6 each on Regional basis (East/North/West/North/Central/South)			1200
3.	(i) 6 Sports Wings in Selected Kendriya Vidyalayas on Regional basis (North/East/West/South/North/Central))	NR: 315) R: 900)		1215
	(ii) 30 Sports Hostels in States/UTs.			

4. SNIPES Field Stations for School students	250
5. Travel Grants to Sports Scholars/Research Workers for undertaking specialised Training/Research	50
6. Strengthening of Administrative set up of Sports Division in the Department of Sports	35
7. Development Programmes of the Sports Authority of India	11196
Total New Schemes	14446

Grand Total (I & II)

I. Continuing Schemes	Rs.18960
II. New Schemes	Rs.14446

T o t a l **Rs.33406**

Rs. 334.06 crores or
Rs. 334 crores.

Youth Services

Youth in the country constitutes a vast human resource which is characterised by idealism and zeal, active habits, positive attitudes towards service to others, an urge to be self-reliant and a willingness to explore newer and non-conformist approaches to social problems. If properly harnessed and utilised, the youth could be a powerful instrument of social, cultural and economic change in the development of the nation. Efforts in the past have, therefore, been made to involve young persons in various tasks of national development and programmes aimed at development of their personality. The youth programmes in the broader sense have been developed with a view to involving both student and non-student youth in various activities keeping in view the following dimensions:

- (i) Preparation of youth for life and work including upgradation of their functional capabilities;
- (ii) youth as a catalyst for social change;
- (iii) participation of youth in national developmental efforts;
and
- (iv) involvement of youth in promotion of national integration.

The proportion of youth covered by the present youth programmes is, however, quite small. A much greater coverage is needed if youth programmes are to have an impact. There is great scope therefore for formulation and launching of new programmes aimed at development of overall personality of youth in order to make them functionally efficient, economically productive and socially useful. Besides, in view of the year 1985 having been designated as the International Youth Year (IYY) by the United Nations, programmes are also required to be developed with a view to achieving the three themes of IYY - Participation, Development and Peace.

ONGOING PROGRAMMES

I. National Service Scheme

The scheme aims at promoting consciousness and a sense of responsibility as well as a sense of discipline and dignity of labour among college students. The Scheme, which is being implemented on voluntary and selective basis, utilises the leisure time of students for two years of their college studies, in various items of social service which not only help the community but also provide an opportunity to the students to appreciate the conditions prevalent in the community.

The scheme was launched during 1969-70 on a pilot project basis in 40 universities and institutions covering 40,000 students of the under-graduate classes. The student coverage has increased gradually and the target for 1984-85 is 6.20 lakhs. During the Seventh Plan period, it is proposed to increase the coverage under NSS to 12.00 lakhs by the end of the Plan so as to ensure that the percentage of student from 16% at present to 25% (approximately)

Since the level of expenditure reached upto 1984-85 will be a committed expenditure even in the subsequent years, it is proposed to make a provision for this amount under Non-Plan for 1985-86 onwards. Keeping in view the expansion proposed and the amount proposed to be transferred to the Non-Plan side, the requirement of funds for NSS during Seventh Plan has been proposed accordingly.

II. Nehru Yuvak Kendras (NYKS)

The Nehru Yuvak Kendras represent and innovative multi-purpose institutions established for the promotion and coordination of activities of non-student youth at the grass-roots. This programme was started in 1972 with the object of serving the interests of non-student youth mainly in the rural areas. Depending on the local needs and priorities, a typical NYK organises activities which include programmes of non-formal education for the rural youth, social service activities like organisation of work camps in the rural areas, cultural and recreational activities, promotion of sports and games, organisation of youth leadership training programmes, and vocational training in trades in which opportunities for self-employment are locally available.

Starting with the establishment of 80 Nehru Yuvak Kendras in 1972, the NYKs have already been sanctioned in 285 districts in the country. It is proposed to cover all the districts in the country by an NYK each as soon as possible.

The money being provided to NYKs for programmes and activities at present is meagre. It is proposed to increase the amount from around Rs.50,000/- at present to Rs.1.50 lakh for various programmes and activities. This is necessary to ensure a larger coverage of non-student rural youth which forms the majority of youth population in the country.

With a view to catering to increasing financial, administrative and programme needs of the programmes, a proposal to set up an autonomous organisation and to expand the programme to 5000 blocks in the country is under consideration.

III. Financial Assistance to Voluntary Agencies Engaged in Youth Work

The Scheme provides a framework for voluntary youth organisations to involve youth for developmental activities mainly in the rural areas. It encourages involvement of voluntary organisations in the implementation of Youth programmes for non-student youth, such as training in skills with a view to improving their functional centres.

IV. promotion of Adventure

The scheme aims at encouraging the spirit of adventure, risk taking, cooperative team work, capacity of ready and vital response to challenging situations and endurance among the youth. Financial assistance is provided under this scheme for undertaking activities like mountaineering, trekking, hiking, exploration for collection of data, study of Flora and Fauna in the mountains, forests, deserts and sea, coastal sailing, raft expedition, swimming, cycling, etc. The response of youth to this scheme has been very encouraging during the last few years. Efforts are being made to popularise the scheme through the State Governments, Universities and the NYKs. It is expected that in the subsequent years the number of proposals from the Universities, Nehru Yuvak Kendras and groups of youth for undertaking adventure programme will be larger than hitherto. With a view to involving a larger number of young persons, small alpine type expeditions would be encouraged. Keeping in view the expected increase in the number of proposals in the coming years, the requirement of funds under the scheme of promotion of adventure during the Seventh Five Year Plan would work out to Rs.175/- lakhs.

V. Establishment and Development of Mountaineering Institute

The Department of Sports has agreed to contribute towards the maintenance expenditure on the Jawaharlal Institute of Mountaineering

and the Winter Sports (J&K) in the same ratio as in the case of HMI, Darjelling. It is likely that in the Seventh Five Year Plan, some more State Governments may come forward with the proposals for setting up of some mountaineering institutes with central assistance. Our requirement of funds for this purpose during the Seventh Five Year Plan take this into account.

VI. Scouting and Guiding

Scouting and Guiding, which is an international movement, aims at developing the character of boys and girls to make them good citizens for inculcating in them a spirit of loyalty, patriotism and thoughfulness for others. Scouting and guiding also promotes balanced physical and mental development of boys and girls.

It is hoped that in the Seventh Five Year Plan, the coverage of young persons under the Scheme would be enlarged and more programmes than at present would be organised in each year of the Plan.

VII. Commonwealth Youth Programme

The youth Division in the Commonwealth Secretariat, London administers the Commonwealth Youth programme. The purpose of the programme is to promote the well-being and development of young men and women in the Commonwealth through training of youth officials and other backstopping activities. All members of the Commonwealth contribute towards expenditure on various programmes and activities of the Commonwealth Youth Programme.

VIII. International Exchange of Youth Delegations

With a view to providing opportunities to young persons as also officials engaged in formulation and development of youth programmes, opportunities for increasing international understanding, increasing knowledge about the latest methods and approaches in youth work and providing opportunities for sharing of ideas and information on youth programmes, the Department of Sports has been receiving and sending youth delegations to other countries for quite some time now. Such exchanges generally take place under the Cultural Exchange Programme.

IX. Promotion of National Integration

The Department has been implementing the Scheme of promotion of National Integration under which assistance is provided to NYKs, educational institutions and voluntary agencies for organising national integration camps and for inter-state visits of young persons.

X. National Service Volunteer Scheme

Started in 1977-78, the National Service Volunteer Scheme (NSVS) aims at providing opportunities to young people, generally those, who have completed their first year degree course, to involve themselves on voluntary basis in national building activities for a specific period and on a whole time basis. The NSVS seeks to provide young people avenues for doing creative and constructive work suited to their educational background and attitude.

It is proposed to extend the deployment of NSVS Volunteers to voluntary agencies and also to revise the rates of stipend and T.A.

NEW SCHEMES

I. Scheme of Exhibitions for Youths

With a view to enabling young persons, both student and non-student, rural and urban and men & women, to acquire knowledge about the developments taking place in various fields of national development, giving recognition to the activities and contribution made by the young people in different fields and promoting a general awareness about the customs, traditions and ways of life of people in different parts of the country and promoting an increasing understanding among the youth, a new scheme, viz. "Scheme of Exhibitions for Youth" has been formulated. The scheme envisages organisation of exhibitions in various fields of Education and Culture like folk dances, folk songs, paintings, arts and crafts, exhibition on books, also exhibitions on any other national or international theme.

II. Scheme of Jawaharlal Nehru Youth Goodwill Yatra

In order to promote mutual understanding and goodwill among the youth from the different parts of the country, promoting a spirit of national integration among them through mass contact, enabling them to understand the ways of living customs and traditions of the different parts of the country by sharing of views and experiences with the youth of the other parts of the country and also enabling them to contribute towards national development through accomplishment of some specified projects, it is proposed to start a new scheme to be called "Scheme of Jawaharlal Nehru Yuva Maitri Yatra".

III. Programme of Training of Youth

With the object of developing personality of the youth, preparing them for life and work and enriching the functional capabilities of rural youth engaged in agriculture and allied occupations, it is proposed to start a new scheme of "Youth Training". Anxiety about employment, job security and economic stability is one of the common causes of psychological and emotional stress among young people which often accounts for many symptoms of youth discontent, disillusionment and frustration. A sense of a secure future has, therefore, to be created

to enable youth to achieve full participation in national endeavours. Even though opportunities for training are available under various schemes being implemented by various other Departments of the Central and State Governments, a large number of rural youth have not had an access to such opportunities. It is, therefore, proposed to develop among the rural youth such aptitudes and skills as it will enable them to function better as productive citizens. The youth for such training programmes would be sponsored by the NYKs and the voluntary organisations working in the field of youth. Rural youth sponsored by the State Governments and NSS Units would also be provided opportunities for training.

IV. National Youth Day and National Youth Week

With a view to focussing attention on our youth and youth activities and involving them in various tasks of national reconstruction, it is proposed to start celebrating one particular day in the year as the National Youth Day and the week following after that day as the National Youth Week. The main purpose of the celebration of national youth day and the national youth week would be to give young people of India an opportunity to highlight some of their activities which contribute to India's development and prosperity

V. National Youth Award Scheme

With a view to recognising good work done by outstanding young persons and thus encouraging young people to contribute their best towards national development and social service, it is proposed to start a new scheme to be called the National Youth Award Scheme from 1985, to coincide with the International Youth Year. Under this scheme, one youth award would be given to 11 best youths for their excellence in one or the other field of youth work.

VI. Strengthening of the Secretariat

To handle the increased load of work as a result of expansion of on-going schemes and implementation of proposed new schemes, some additional posts would be necessary.

VII. Programmes for Celebration of International Youth Year

A calendar of events has already been finalised by the Working Group and the same will be approved for implementation by the National Youth Board/National Coordination Committee for IYY when constituted. For meeting the expenditure on various programmes and activities proposed to be organised during 1985 an amount of Rs.50.00 lakhs (approximately) would be required during 1985-86.

VIII. Youth Clubs

Youth clubs at the grassroots are the main agencies without which no programme of youth activation can really be successful. During the Seventh Five Year Plan, it is proposed that atleast one youth club should be started in each development block. Besides 5000 youth clubs proposed to be started at the block level, about 500 youth clubs in urban areas/slums are also proposed to be started through the NYKs/Voluntary Agencies.

YOUTH SERVICES : PROPOSED OUTLAY FOR VII FIVE YEAR PLAN (1985-90)

(Rs. in lakhs)

Sl. No.	Name of the Scheme	VI Plan Allocation	VI Plan Expenditure (Estimated)	VII Plan Outlay
I. Continuing Schemes				
1.	National Service Scheme	450.00	332.46	1500.00
2.	Nehru Yuvak Kendras	500.00	451.86	8500.00
3.	Financial Assistance to Voluntary Agencies	93.00	40.64	150.00
4.	Promotion of Adventure	72.00	81.78	175.00
5.	Establishment and Development of Mountaineering Institutes	8.00	2.00	25.00
6.	Scouting and Guiding	30.00	12.54	40.00
7.	Commonwealth Youth Programme	11.00	1.16	10.00
8.	International Exchange of Youth Exchange	13.00	7.16	30.00
9.	Promotion of National Integration	17.00	29.99	120.00
10.	National Service Volunteer Scheme	60.00	14.63	830.00
II. New Schemes				
1.	Exhibitions on Education and Culture for Youth	-	1.36	100.00
2.	Scheme of Jawaharlal Nehru Youth Goodwill Yatra	-	-	84.00
3.	Training Youth	-	-	750.00
4.	Programme of Celebrations of National Youth Day and National Youth Week	-	10.00	25.00
5.	The President Youth Award Scheme	-	-	10.00
6.	Strengthening of the Secretariat of Youth Division in the Department of Sports	-	-	32.50
7.	Programmes for Celebration of IYY	-	-	50.00
8.	Youth Clubs	-	-	550.00
		1254.00	985.58	13002.15

OR say Rs. 130.00 crores

Physical Education and Yoga

Physical Education and Sports are today accepted as an essential and integral part of Education all over the world. The UNESCO has also recently adopted an International Charter of Physical Education and Sports which recognises that Physical Education and Sports are not confined to physical well-being and health but also contribute to the full and balanced development of the human being. The National Sports and Physical Education Policy has recently been approved by the Cabinet. The IX Asian Games successfully held in Delhi in 1982 have generated considerable enthusiasm for sports and physical education particularly among the young and this should be profitably channelised for promoting mass participation in schools and for generating a yearning for high achievement. However, the programme has continued to by and large languish so far and both mass participation and quality have not materialised. The programme, therefore, requires to be vigorously implemented and given a fillip by Central intervention in a few key areas during VII Plan Period.

2. The Resolution on National Policy on Sports and Physical Education makes it the duty of the Central and State Governments to accord a very high priority to promotion of sports and physical education in the process of all round development. The policy statements embodied in the Resolution take the following factors into account:-

- (i) Importance of participation in sports and physical education activities for good health and high degree of physical fitness, increase in individual productivity and its value as a means of beneficial recreation promoting social harmony and discipline;
- (ii) recognition of the need of every citizen irrespective of age and sex to participate in and enjoy games, sports and recreational activities.
- (iii) provision of the necessary sports facilities and infrastructure on a large scale to fulfil the need of every citizen recognised above;
- (iv) provision of facilities for spotting and nurturing at a young age talented boys and girls and provide them coaching training and nutrition required to meet the necessity recognised above.

It is now well established that mass participation in sports, games and physical education activities in schools leads to better health of the students leading to higher learning capabilities. These would constitute worthwhile achievements. Moreover, a sustained tempo of such activities in schools would improve the school environment by making it more interesting which may hopefully favourably influence retention rate in schools and thereby help in achieving the goal of universalisation of elementary education.

In view of what has been stated above, the Seventh Five Year Plan provides us an immediate opportunity to implement the policy statements contained in the Resolution on the National policy on Sports and Physical Education not only by expanding the continuing schemes but also introducing certain new schemes during the Seventh Plan period for achievement of the objects of the National Policy in a phased manner. Further, in keeping with the very high priority now attached for the first time to promotion of sports and physical education, the thrust of the 'Approach Paper' towards greater productivity and the urgent need to upgrade our human resources, substantially higher Central investments on Physical Education and Sports would be required as compared to the Sixth Five Year Plan, if a beginning is to be made in implementation of the new National Policy. The allocation made in the Sixth Plan, as in earlier Plans, have remained of a token nature and should not, therefore, be taken as the base for considering allocations to be made in the Seventh Five Year Plan for these activities.

Upto the Sixth Plan Period our main emphasis has been on training of physical education teachers of high calibre through the Lakshmibai National College of Physical Education, Gwalior and also assisting the physical Education teacher training institutions in the States for improvement and/or development of their physical facilities. Besides these, in recognition of the potential contribution of Yoga in promotion of fitness, a modest scheme for promotion of research and teacher training programmes in Yoga has also been taken up. All these three schemes are being continued through the Seventh Plan, suitably modified and expanded, to meet the growing demands of the Seventh Five Year Plan. Besides these, certain new schemes are proposed to be taken up during the Seventh Five Year Plan primarily to encourage mass participation in physical education and sports programmes and to assist the State Governments and other agencies in creation of physical education and sports programmes and to assist the State Governments and other agencies in creation of physical infra-structure for these programmes at the grass-roots level. Concerted efforts will have to be made to develop our schools as the 'nerve centres for our physical education and sports programmes. Unfortunately, our schools, though nurseries for our budding sportsmen and women have continued to be neglected. Further, to meet the growing demand for adequately trained teachers, facilities for training of physical Education teachers are proposed to be expanded by setting up four Regional Branches of Lakshmibai National College of Physical Education for a wider impact on training of teachers of high calibre and promotion of research and also assisting the University Grants Commission in its efforts to expand the teacher training facilities by introducing a 3 year broad based degree course in physical education in certain selected Colleges in the country.

Proposals on physical education and Yoga for the Seventh Five Year Plan (1985-1990), incorporating therein the 'Continuing' and the 'New Schemes' (Annexure) envisage a total outlay of Rs. 207 crores out of which Rs.14 crores are for the continuing schemes and Rs.193 crores for the new schemes.

Annexure

Physical Education and Yoga : Proposed Total Outlay
for VII Plan period, (1985-90)

(Rupees in lakhs)

Sl. No.	Name of the Scheme	VI Plan Allocation (1980-85)	VI Plan Expenditure (Estimated) (1980-85)	VII Plan Proposed Outlay (1985-1990)
1	2	3	4	5
A. Continuing Schemes				
1.	Lakshmibai National College for Physical Education (Gwalior)	50	72	462
2.	Grants to Physical Education Training Institutions	25	22	150
3.	Promotion of Yoga	50	28	800
	Rs.	125	122	1412

B. New Schemes

1.	Establishment of Four Regional Branches of LNCPE, Gwalior	-		1600
2.	Financial Assistance to Colleges (Other than Professional Colleges of Physical Education) for introducing 3 year Degree Courses in Physical Education	-		2000
3.	Assistance to Selected Schools for development of Physical facilities for physical education and sports programmes/setting up gymnasias in selected towns	-		15500
4.	Travel Grants to Physical Education personnel for visits abroad			25
5.	Reorientation Programme for In-service Primary School Teachers	-		100

1	2	3	4	5
6.	Search for Excellence and Nurturing of Talent			100
7.	Strengthening of Administrative Set up in the Ministry of Education (Central level)			10
				19335
	(A) Continuing Schemes			1412
	(B) New Schemes			19335
				20747

Rs. 207.47 Crores
or Rs. 207 Crores

Chapter XIV

INFORMATICS LIBRARY SERVICES

During the previous Plan periods Libraries and information services were in general considered as auxiliaries of the parent institutions or organisations such as various Ministries/Departments, Universities, Research Institutions, etc. with the result the funds for them were coming from the parent body's budget-heads. A public library in addition is an essential element of the community which needs to be supported by the community as a whole. In view of the vital role in research, education, industrial growth and socio-economic development of the country the need for their establishments and developments has duly been well accepted in the country. In addition Information technology is also an area of fundamental importance to the economic development of a nation as it plays potential role in the regeneration of the nation's industrial and commercial base.

While recognising the role of library and information services in planning, national development and other areas it is strongly recommended that henceforward Library and Information Services should be considered as independent sector like other sectors during national plan formulations. The investment required for this sector will partly be met from its own specific allocations and partly from the budgets of the parent institutions.

Library & Information Services

The Report at first presents position of Public, Academic, Special and National Libraries in the country. Only five States have enacted the public library law and most of these libraries concentrate on lending services. The Public Library Sector needs to be expanded and strengthened so as to provide easy access to Public Library Service by larger number of people in the country. In the case of Academic libraries, while there has been an overall improvement in University Libraries, the number of good college libraries is still quite limited. Most of them continue to face various problems such as paucity of funds, physical facilities, shortage of staff, etc. Lending service is the major activity of most of the Academic libraries and special services such as current awareness, SDI are usually not provided. The school libraries in general have lagged behind in the development process.

The progress of the Special Libraries, Documentation Centres in the country is closely linked to the status of science and technology and socio-economic development programmes. Being an essential component for supporting R & D as well as scholarship, creation and development of special libraries, information facilities have been receiving attention of government authorities very well. In order to aim at an optimum output, planning of information systems around the existing infrastructure is contemplated. The action programme envisages interlinking and coordination of a large number of

resources, services and centres into effective information systems under an overall coordinating agency. A trend in this direction has already been set up during the Sixth Plan period by evolving a few national information systems. A more concrete shape to the concept of Information Systems is expected to be given in the Seventh Plan period. With regard to manpower development, need for highly qualified professional staff has become more pronounced and several Universities and Institutions such as INSDOC and DRTC have included in their curriculum specialised papers on Information Technology/Computers.

Since the existing library and information programmes are generally ad-hoc, un-related to one another, it is highly essential that future development of the nation's library and information resource would occur in a cohesive manner according to a national plan based on a National Policy for Library and Information Service (L&IS). The National Policy will set forth the future objectives in clear terms, which will serve as guidelines for the development and improvement of L&IS in the country.

In view of the vital role, the public libraries play in development and national reconstruction, it is essential to have a well developed and well knit system of public service. For this purpose it is necessary to enact public library law in all the States/Union Territories. In case of Universities, in order to promote the use of libraries the traditional lecture-method of teaching should be replaced by library-centred method such as lecture-cum-discussion, seminars, tutorial and such other methods. In addition, newer methods of evaluation such as 'Internal assessment', 'periodical assessment' etc., will also increase the use of libraries by student community.

The value of information is mentioned implicitly in our science policy resolution, by drawing attention to the systematic development of knowledge base. Further, the need for design and development of an efficient technology information system is emphasised in the recent Technology Policy Statement. The approach to development of special libraries, information centres and systems during the next 10 years or so shall be to move towards their dynamic, efficient practical, modern and user-oriented organisation and management from the present traditional and 'conservative set up, so that an assured information flow backs up diverse national development programmes. The special libraries and information centres should be equipped to handle, besides bibliographic information other kinds of information such as management information, techno-economic information and the like.

All modern information services are necessarily to be backed up by an efficient document delivery system, involving, actual provision of copies of documents. In this context, the document copy supply services of INSDOC, SSCDC and other national centres have to be strengthened. Similarly Union Catalogue is an indispensable tool for cooperative acquisition, resource sharing, inter-library lending etc. The Union Catalogue Programme of INSDOC, SSCDC and other organisations need to be computerised so as to have access through national network.

The libraries being a growing organisation, usually suffer from a shortage of accommodation. It is particularly more acute in the case of government department libraries. Dormitories for the service libraries to unload their obsolete collection have to be organised in suitable locations. This cooperative storage facility would help the libraries to keep only an active collection.

User satisfaction is the current day approach to library and information service. The outlook of libraries should change for orienting the entire organisation and services from the angle of users and their satisfaction.

Delhi being the capital city, it should have a Central Reference Library. Though this has been already recognised by the Union Government, it is yet to be implemented. It is essential to have in Delhi the Central Reference Library, with functions clearly defined and the Indian National Bibliography (INB) which has to be brought out through this library.

In case of Education and Training in L&IS, it is essential for the library schools in the country to give a fresh look to the existing syllabi and give a new orientation to their programmes by integrating the 'Information Science' component in their existing contents. Also continuing education for L&IS teachers and practising librarians are given due priority.

Some of the major problems being faced by our libraries, information centres and systems, as discussed in the earlier chapters, and which would require consideration during the Seventh Plan may be summed up as follows:-

1. Insufficient document resources to meet the needs of their users,
2. the increasing cost of library materials and organising them for use,
3. the growth of knowledge, with the consequent demands, particularly in university libraries and special libraries for a wide range of specialized materials,
4. the varying levels of financial resources and funding provisions or abilities of authorities in the country;
5. the cost of storing infrequently used materials that accumulate when a library tries to be self-sufficient,
6. the requirement to serve communities and users that are not being served,
7. lack of physical facilities in terms of space, furniture, equipment and others;

8. the difficulty in attracting and recruiting right type of professional staff to meet the changing and complex information needs of users;
9. the need for developing cooperation and resource sharing; and
10. the need for improving and diversifying the educational and training programmes in Library and Information Science (L&IS).

The recommendations for library and information services are grouped as General and Specific recommendations.

RECOMMENDATIONS ON LIBRARY SERVICES

1. Formulation of National Policy for Library and Information Service.
2. Establishment/Strengthening of separate Library Directorate/ Departments etc.
3. All India Library and Information Service.
4. Publication/Productin of materials to meet and promote reading habits among the people.
5. Public Libraries: should be established/developed on priority basis; coordinated with other Agencies; a network to be planned, enactment of public library law in all States on top priority and existing public libraries run by private organisations to be integrated in the concerned areas.
6. Academic Libraries: Substantial increase in their book budgets, to improve their resources and services through resource sharing, to establish Library system for Universities, Dormitory Libraries on local and regional basis, emphasise on library services, including lending facilities, active role for professional staff in providing services, larger funds for library building furniture, equipment, reprographic facilities.
7. School Libraries sufficient provision for their establishment, development and expansion should be provided.
8. Special libraries, Information Centres and Systems: Strong commitment of the parent institution to provide the required support and infrastructural facilities, need for larger budgets, Dormitory Libraries, National Information Systems to be further expanded.
9. National Libraries: Define the aims and activities of the 4 National Libraries (NL, NML, NSL, IARI) in specific terms - One copy of each of the core research journal and other research materials should be available in the concerned

National Library, under the Delivery of Books Act (1954) copies or documents published in India are deposited in these four libraries, Central Reference Library & INB - Central Reference Library be shifted/established at Delhi and work of INB assigned to it, to establish national libraries in areas such as Manuscripts and social sciences during the VII Plan, to modernise existing National Libraries.

10. National Centre for Education and Research in L&IS: to promote education and research activities of high academic standards a National Centre for Education and Research in L & IS be established on the pattern of other national level centres such as NCERT, NIIEPA...., consolidation of existing library schools, to revise syllabi and include areas of Information Science and Computer Applications, continuing programmes, user studies for teachers of L & IS and practising librarians, incentives in the form of research fellowships, travel grants etc. to attract good quality students.
11. Library Associations : To provide adequate financial support on regular basis to professional bodies at National and State level to enable them discharge their responsibilities in an active manner.

Informatics and Computer Applications

While explaining information as a Resource and it's role in planning, informatics is described as processes, methods and laws related to the recording, analytical synthetic processing, storage, retrieval and dissemination of (scientific) information. Informatics relates to all problems and methods affecting information. Various Information Services and Information Infrastructure in Indian context is further reviewed. Computer Applications in Libraries have been described in details - with respect to areas of application, Indian scenario, giving a chronology of the major events of computer applications in Indian libraries. Advantages of on-line bibliographic data base developed at National Informatics Centre (NIC) in 1980 - Information System on Electronics is given with objectives, features of the system and details of the sub-systems computerised. Further, concept and organisation of the Library and Information networks in general and objectives and development of National Library and Information networks in particular are discussed. It gives information sources, developmental steps, structures and implementation aspects of the network. The report describes the new information technologies now available. Details of Facsimile, Video Conferencing, Electronic Mail, Video text/Teletext, Word Processors, Intelligent Terminals/Copiers, Micrographics, COM, Video Discs have been described.

Further, the proposed computer networks in India are described in three networks

- I) RIKSCA -- Regional Informatics Network for South and Central Asia,
- II) NISNET -- Computer Network for Government,
- III) INDONET -- Computer Network for Commercial use.

A proposal for computerisation of small, medium and large types of Libraries is then given. The Computer Configuration required for the project, interlinking of the library system and investment profile is described.

RECOMMENDATIONS ON INFORMATICS

1. The present library community should be exposed to the concept of computers and its usage. For this awareness and specific library oriented programmes should be conducted.
2. The library training courses should be enlarged to include computer application aspects. Emphasis should be more on information handling, organisation and usage.
3. During the Seventh Plan period the goal should be to computerise most of the major libraries. This should be carried out in a systematic manner so that information exchange is possible. Certain standards with respect to hardware and software have to be evolved.
4. A Group has to be set up at the apex level to work out the plan for computerisation. The Group should also work out standard specifications for hardware and software for implementation at various levels. This Group should consist of computer specialists, library scientists and educational experts. The Group should be made responsible for monitoring and evaluating the computerisation in the libraries.
5. Software development activities have to be initiated for evolving a standard software for meeting the library requirements. This should be implemented on standard indigenous systems.
6. In developing the computer applications, first importance should be given for developing a union catalogue, and a national bibliography.
7. A plan for interlinking the library systems should be worked out. It should give a detailed plan of action for developing the library network.
8. New technologies (telematics) like videotext, teletex provide ample opportunities for disseminating information at the cheapest possible manner. Such systems should be

experimented with a view to study its impact on the society. It will enable to access a wide variety of data in the shortest time.

FINANCIAL PROFILE

The Working Group emphasises that Library & Information Services should be considered as a separate entity in itself and proposes a separate investment profile for the Seventh Plan. Of the total investment of Rs. 996 crores proposed, some portion of it had to be provided in the State plans.

While arriving at the financial profile, due emphasis is given for all components of library & information services. Allocation have been made in such a way that priority areas like Public Libraries, National Libraries and Systems and Informatics have been given emphasis for fast development. The details of the financial estimates are given in the table below:

Working Group on Modernisation of Library Services and Informatics

FINANCIAL ESTIMATES FOR THE SEVENTH PLAN (1985-90)

	Rs. in Crores	
1. Public Libraries	100	100
2. Academic Libraries		
(i) Universities & Higher Education	150	
(ii) Secondary Education	100	
(iii) Elementary Education	30	
(iv) Technical Education	80	360
3. Special Libraries/Information Centres		
(i) Science & Technology Libraries/ Information Centres	200	
(ii) Government Ministries/Departmental Libraries	30	
(iii) Social Sciences and Humanities Libraries	50	280
4. National Libraries (including Indian National Bibliography)		
(i) Existing (National Library, Calcutta National Science Library, National Medical Library, I.A.R.I. Library, etc. and also Parliament Library)	50	

(ii) Proposed (National Library of Manuscripts, National Social Science Library, Central Reference Library & INS)		20	70
5.	(i) National Information System on Science & Technology (NISSAT)	5	
	(ii) National Information System in Social Science (NISS)	5	10
6.	Informatics		
	(i) Computerisation of Libraries	75	
	(ii) Modern Information Tools	30	
	(iii) Library Networking	45	150
7.	National Institute of Library & Information Science	5	5
8.	Establishment/Strengthening of Library Directorates/Departments		15
9.	Grants to Library Associations		1
10.	Publication/Production of Materials		5
Total (Rs.in crores)		996.00	

CHAPTER XV

PLAN IMPLEMENTATION

The Seventh Five Year Plan essentially a reaffirmation of commitments to certain priorities and goals, basic to the process of educational development in course of the next five years, while at the same time providing much needed new thrusts. The Plan objectives in education are set in the context of certain national perspectives: "Education for All" through universalisation of elementary education and adult and non-formal education to be achieved by 1990; vocationalisation of education at the plus two stage, lending a practical bias to higher education; consolidation of technical education, optimising application of technology in education and improving the relevance and quality of education at all stages are some of the major thrusts of the Seventh Plan. The basic goals to be achieved during the Seventh Plan are indicative of the major concerns emerging out of a national consensus on a broad frame of development in which education is not merely a sector of development but an input common to all sectors of development. To achieve a nation-wide impact of the educational programmes, it would be necessary to develop a national consensus on issues and approaches of plan implementation.

2. The process of plan implementation during the last thirty years or more is characterised by a few weaknesses. Firstly the conceptual understanding of education has often varied at various levels. In the absence of consensus and understanding of the basic goals of education, the result is far from uniform. Also, the various educational schemes proposed in the previous plan periods have been interpreted differently. Another major problem is that development of education and implementation of educational programmes have been seen in isolation of other developmental efforts. As a result educational development has not been linked with the main stream of development of the country.

3. The approach to the Seventh Plan envisages effective involvement of all sectors of development in the educational process and also linking the education system to other relevant sectors of development where the objective is to strengthen the educational component under each relevant programme and improving the functional relevance of education. Again the emphasis during the Seventh Plan will be on improving the quality of education at all levels, inculcating socially relevant values and attitudes, elimination of wastage, improvement of efficiency, linking education to technological changes and developing and integrating education with other developmental sectors. In short, the emphasis will be more on improving the efficiency of the system of delivery, with appropriate changes in content so as to achieve desired results, instead of only quantitative expansion.

4. The translation of the basic goals envisaged during the Seventh Plan into a set of action oriented programmes would need legislative support, in addition to effective community involvement and generation of mass initiative in support of programmes. Through legislative support, formal recognition of efforts and policies in education can

be created in the State budget on education providing additional resources for educational development, public and private sectors can be brought to accept responsibilities in education, participative management of education involving the community can transcend from a social gesture to a responsibility through legislation; recognition of the skills acquired as a consequence of vocationalisation at the plus two stage for jobs can be granted. Legislation should be resorted to ensure the quality in education through the process of accreditation by the relevant bodies like the University Grants Commission, Universities, State Boards of Secondary and Higher Secondary Education, State Boards of Technical Education. Legislative support is also required to regulate the undesired proliferation of sub-standard educational institutions, in particular opening of new institutions of higher education technical institutions, so as to prevent low quality products from such institutions, entering the labour-market, who are largely unemployable.

5. Education although a Concurrent subject is at present essentially within the sphere and competence of State Governments. Also Plan investments or new additional outlays on education through central schemes are only a small part of the total outlay on education, the capacity of the "Plan" to influence or modify the total system to that extent is rather limited. What is needed therefore, is to identify the basic strategies in the totality of Plan and non-Plan together; not only from the financial point of view of zero-base budgeting, but with a view to arrive at a basic consensus and understanding among the States and Centre as to the substance of what is sought to be achieved and the means of achieving goals in the next five years. It is suggested that the first year of the Seventh Plan should be devoted to achieving this consensus and arriving at a broad blue print of action that should help in the implementation of educational programmes in the Seventh Five Year Plan.

Restoring Community Initiative in Education

6. India has a long tradition of community initiative in education. The government involvement came more as a support to the local initiative. But over the years the configuration changed, and government has become solely responsible for education. The negative effects of withdrawal of community initiative on education is being increasingly realised. A fresh effort needs to be made to restore the initiative of the community. Community's involvement only to the extent of a catalytic role will not be adequate. The objective of mass education by 1990 has to be achieved through an integrated model of educational development. And to this extent, 'education for all' has to be achieved by 'education by all'. To develop a culture of renewed enthusiasm of the community in education and ensure the development of an integrated popular model, a campaign to educate the masses regarding the constitutional commitments, plan objectives and schemes is to be conducted through mass media; parent-teacher's meetings, seminars and cadre based campaigns. Rural youth organisations sports clubs, recreation clubs, libraries, mahila samities have to be mobilised. Alongside this programme of awareness, it would be necessary to involve the members of the community in the

activities of education-in enriching physical facilities like buildings, books, equipments, boards, etc., improving instructional quality by teaching supplements in vocationalising with the help of development agencies and local resources in managing the institutions; and in significantly using the educational institution - its physical and human resources in the development of the community as a whole. In achieving these objectives, various activity committees have to be constituted with members from formal and non-formal groups and organisations in the community.

7. The implementation of the plan is proposed on a project based model. The plan objectives are visualised to be achieved through a series of schemes. Each scheme should be studied and examined in terms of the implications in the given local socio-economic and cultural background. The schemes should be analysed and spelt out in the form of a number of interrelated activities. Project should be designed around each identifiable major activity, at the state district and block levels. Thus the methods of micro level planning in interface with project approaches should be the fundamental strategy of ensuring implementation. The main stay of such projects would essentially be at the block and district level implying a shift in the focus of educational activity from the state to local levels. It would be necessary to strengthen the infrastructures at the district and block levels. Additional infrastructural facilities would be needed also to monitor the activities at subsequent levels.

8. Monitoring and evaluation are important components of the implementation strategies. In order to ensure implementation the concept of monitoring has to be changed from periodic reporting to activity assurance and performance auditing. Monitoring has to be continuous and provision should be made to utilise monitored information in such a way as to secure results. Evaluation is another component which needs to be built in the plan implementation processes. Instead of using evaluation to classify activities as 'successful' or 'unsuccessful', it should be used as a diagnostic tool. It should be possible to diagnose the weaknesses during the process of implementation so that effective steps can be taken to remove the same. Monitoring and evaluation should be taken up for major schemes in Education and Culture and provide requisite manpower and organisational support.

9. As mentioned earlier, education so far has operated in isolation of other developmental efforts. In order to achieve the educational goals and contribute to the total developmental goal, education must be structurally linked with other developmental efforts and agencies. Education as a sector must find place in the District Rural Development Agency, and at State level. It should develop linkage with industry, programmes of development of agriculture health, entrepreneurship, alleviation of rural poverty, and other appropriate rural development programmes, as well as programmes for development of women and children.

10. Another aspect of structural redesign would be development of intra-structural linkages within education. The primary, secondary, higher secondary, collegiate and university education and professional

education should be interlinked. Another structural change would be to develop the network of institutions. At the school level, the concept and practice of school complex needs to be rejuvenated and implemented in right earnest. The NCERT and the state level counterparts in the form of SIEs and SCERTs is another network. In the field of educational planning and management, the NIMPA has provided a useful service. It would, however, be necessary to develop a network of institutions in the country imparting training, research and consultancy in educational planning and management. State governments should identify some of its specialised institutes, universities, institutes of public administration, etc. to act as nodal agencies for training in planning and management. The national level agencies in such a nationwide network can take up the training of trainers as their major responsibility. The concept of network of institutions should also find place in technical and vocational education and engineering.

11. The plan objectives for successful implementation would demand decentralization, particularly in the priority sector of mass education, with the locus of control shifting from state level to district and block level. The new structure envisaged here would result in concentration of activities at the level of blocks and districts, for mass education programmes which should be considered as the main organizational units responsible for planning, curriculum designing and implementation. The details of the operational shift of emphasis is discussed in a few paragraphs at a later stage.

12. Teachers should be involved in local level project design, developing community initiative in education, school mapping, etc. Teachers should be encouraged to set up teachers' centres, and form professional associations. Their active participation in planning and implementation should be encouraged.

13. The use of Educational Technology, in teaching, management and particularly in developing educational information system should be encouraged. Computer technology, informatics, production of hardware and software, self-instructional media, radio and television, tape archives, learning resource centres media for neoliterates etc. should be emphasised for use in education.

14. It has been proposed earlier to shift the locus of control from state level to district level and preferably to block level. It must, however, be realized that the personnel in the district level has not increased in correspondence with the increase in number of institutions or students attending such institutions. The work load has increased manifold and the district and block level staff are not able to inspect and supervise the schools for years together. Where the inspection has been carried out, even with subject specialist panels, the result has not been much different. Thus both infrastructure and the work design of the inspectorate staff at district and block level needs to be examined.

15. Although the need for decentralisation of educational planning at the district and institutional levels is fully appreciated, little effort has been made to formulate such plans and integrate them with

the state and national plans. It is well recognised that socio-economic conditions differ to a great extent in the state, not only from one district to another, but also from one block to another block within the same district, so that the fulfilment of targets, both quantitative and qualitative of the state plans cannot be ensured, unless detailed planning, project formulation and evaluation are attempted at the district level to meet, for example, the requirements of the under-privileged groups or of the economically backward areas. Further, in several matters such as location of schools, the planning of vocational education at the school level, the planning of school buildings, laboratories and libraries, provision of facilities for games and sports, the provision of text-books, mid-day meals etc. appropriate decision could be taken only at the local level.

16. The administration at the district level is by and large engaged in routine activities as appointments, promotions, transfers or issuing financial sanctions or meeting audit objections. This kind of administration is concerned more with control functions. On the other hand, what is required in our situation is 'development administration' which focuses its attention on the objectives of the systems and strives relentlessly to achieve them by adopting flexible and dynamic approaches and is more concerned and keen to provide opportunities for initiative, creativity and experimentation to individuals and institutions.

17. In spite of some efforts made in some states, the information system has remained weak. It takes years to collect and compile educational statistics at the state and national levels. Even the important data relating to enrolment, teachers and educational expenditure required for making realistic plan proposals becomes available long after its utility is over. The quality of the data collected is also doubtful. In fact no in-built mechanism has been designed to collect and make available accurate data in time, when needed. We have also no research studies at the district level undertaken to find solution to local problems and also to test the efficacy of the remedial action proposed. Absence of monitoring and evaluation machinery at the district level results in defective implementation of the plan programmes and the objectives and targets laid down in the plan remain un-achieved.

18. In the process of work redesign a DEO is expected to shoulder increasingly, professional responsibilities. He has also to deal with thousands of teachers and other employees involving transfers, promotion, payment of salaries, grievances, etc. In this context, it would be necessary to develop in the DEO, in addition to professional competence, managerial abilities as may be required to help him in the performance of multi-tasks.

Professional Intervention

19. The actions suggested in the preceding paragraphs are neither exhaustive nor conclusive. They hold certain promises and need to be adopted. The adoption of the strategies would require additional financial resources. Over the years, the expenditure on educational

administration, direction and supervision which was about 5% of the total expenditure on education before independence, has declined to about 2%. This is not a comforting trend as it implies that the expenditure on direction and supervision have not been commensurate with the expansion of education -- the institutions, teachers, students, etc. In order that the plan objectives are achieved, the expenditure on administration, direction and supervision has to be increased adequately and effectively. Adequate funds should also be provided for research and experimentation and for training and reorientation programmes based on a careful assessment of training needs at various levels. Assistance has to be provided for project formulation, extension of education to the poorest of the poor, weaker sections, minorities, women and remote and sparsely populated areas, establishing teacher centres, rejuvenating school complexes, establishing block level training nuclei, and district institutes of education, strengthening block and district level infrastructure, providing technology in education, and for successful training and research interventions. The details of financial implications are given in the annexure.

CHAPTER XVI

RESOURCES

Resources flow into the Education Sector from three main sources:

- (i) Plan resources from the Government;
- (ii) Non-Plan resources from the Government; and
- (iii) Private or non-Government resources.

Private or non-Government resources are in the form of fees from the students, donation, endowments, in addition to the expenditure incurred by the individual or household on the education of children such as on books, transport, hostels uniform etc. Plan and Non-Plan resources come from the Government.

The proportion of the public expenditure on education has increased from 68% in 1950--51 to 85% at present. The expenditure from the private sources has on the other hand declined from 32% in 1950-51 to 15% at present. The 15% of private expenditure consists of 12% contribution from fees and 3% from endowments and other sources.

The total Government expenditure on education (both Plan and Non-Plan) is likely to reach a level of Rs.6000 or more by the end of Sixth Plan period, with an average annual growth rate of 9-10%. The non-Plan expenditure alone constitutes 87% of the total expenditure, leaving only 13% plan expenditure to be used for further development. According to the available information, the annual Plan expenditure on education is likely to reach to the level of Rs.800 and odd crores by the end of the Sixth Plan period, which has the total plan outlay of the order of Rs.2524/- crores.

The Working Groups set up by the Planning Commission for various sub-sectors of education, have assessed the total seventh plan requirements of the education sector of the magnitude of Rs.15,000 crores or so, which is nearly six times of the Sixth Plan approved outlay for education. While there is a case of high collection of resources for education sector, especially if it is effectively linked with economic and national development of the country, still it would be difficult to meet the growing financial requirements of this sector from the resources of Government alone. Many suggestions have been made by various committees and individuals, but no effective steps have yet been taken by the Centre and the States, to augment non-governmental resources although some measures have been adopted by a few states such as levying education cess, etc. raising of examination fee etc. The Working Group on Resources for Education Sector in the Seventh Plan, was set up by the Planning Commission to specifically consider the suggestions. It has made several concrete suggestions for the consideration and adoption by States, according to the local needs.

Suggested Measures

(i) Determined efforts should be made for economizing and optimally utilising the resources allocated for education. A high level committee may be set up in States for making survey for optimal utilisation of existing infrastructure and resources.

The structure and pattern of utilisation of Plan and non-Plan funds should be reviewed and reoriented to meet the increasing demands of educational development. All vacancies of teachers in the existing institutions should be filled from non-plan funds and not made up from plan funds. Non-Plan funds should also be utilised as far as possible for improvement of classes, laboratories, hostels and libraries etc. One of the most important steps however would be the redeployment of teachers so that their posting are rationalised as often emphasised in the recommendations of Central Advisory Board of Education and various other committees' meetings. The creation of posts of teachers and their postings should be reviewed from the point of view of needs according to norms rather than an "employment promotion" programme. The intake capacity of teacher training institutions should be strictly regulated to reduce the "surplus trained teachers", which puts pressure for the creation of the posts and their filling up irrespective of actual needs.

(ii) Cost-saving devices may be adopted to reduce the unit cost of various programmes through alternative strategies which may also help in the successful implementation of the programmes. For example now that majority of the non-attending children and adult illiterates are proposed to be covered through various non-formal, informal and part-time education programmes, it is desirable to intensively utilise the teachers engaged for these programmes. Also it is suggested that a second teacher in single teacher schools or additional teachers in the existing multi-teacher school on the basis of teacher-pupil ratio, may be appointed either part-time or on reduced fixed salary as a helper to the teacher with a view to reduce the bulging salary budget of elementary schools. It should be possible to adopt cheaper methods of construction, utilising local resources for school buildings and also modify our plans for hostels and other educational institutions in such a way as to achieve savings in costs without sacrificing the facility as such.

(iii) As indicated earlier, income from tuition fees is now a dwindling source. While primary education is free in all States, education is free upto 10th Class in few other States, particularly in respect of girls. The structure of fees charged in secondary schools and colleges has remained almost static for a long time, in spite of cost escalation. Even a nominal fee is charged in highly technical and professional institutions. The time has come when the fee structure has to be reviewed and hard decisions are taken from the point of view of raising the fees at all stages of education so that the contribution from fees might develop to at least 20% of the expenditure for education in the States, (as was the case in 1950-51). While it may be unacceptable idea to charge any tuition fees in the primary stage, it is highly desirable that at least 50% increase should be made in the tuition fees charged in secondary schools and

colleges for general education. So far as technical and professional colleges are concerned, there should be no two opinions about the need to make such institutions self-financing and all subsidies in the form of tuition fees should be removed (with appropriate scholarships for the minorities and the needy). International studies have revealed that subsidizing technical education in developing countries in fact amounts to the subsidies for the developed nations, because of the well known phenomenon of brain-drain. The students in technical and professional education institutions may also be assisted in getting loans from Banks and other financial institutions, even if they would involve changes in the rules governing such loans of Finance. For administering the scheme of loans, the setting up of an Education Development Loan Corporation may also be considered.

(iv) Besides the tuition fee, specific fees for specific purposes such as library fee, laboratories fee, games fee, magazine fee, building fee etc. are also prescribed by Education Departments in almost all the States. This fee income is kept separately to be utilised by the Head of the institutions for the purpose for which it is charged and this is for the programme of quality improvement. In this connection, it is proposed that the head of the institutions should be given complete charge of these types of fees in institutions beyond the compulsory stage. The income thus received from these fees should be kept separately to be merged in 'school fund', which may be created in all institutions above the compulsory stage. To this fund can also be added voluntary donations and contributions from private bodies and managements for specific development purposes. The institutions should also be left free to charge higher tuition fees for those who can afford beyond even the minimum prescribed rates and also charge any other type of fund that the institutions deemed necessary for its development. The contributions received by the institutions from the specific fee donations and other charges may be merged into the proposed 'School Fund', which should in no way be linked with admissions and examinations. It should be utilised only for improvement programmes and not for the payment of teachers' salaries and allowances. This should be managed by a committee consisting of parents, teachers, and students with the head of the Institutions as its chairman.

(v) States should activate the Community Participation at the local level. the Communities may be actively involved in the implementation of the programmes of universalisation of elementary education and adult education and should be made to contribute either in cash or in kind in the form of land and equipment. The successful implementation of this programme in Tamil Nadu may be adopted as one of the models in this regard for contribution to equipment and facilities. Apart from the monetary contributions by public towards expenditure on education incurred on their children, the community will be motivated and committed to the programmes of education, and this will help in improving the enrolment and retention rates, necessary for the successful implementation of the strategic programmes of universalisation of Elementary Education and Adult Education.

The role played by the local community in establishing new institutions particularly at the Secondary and the Degree levels is well recognised in the country. But the burden of their maintenance and development falls ultimately on the Government, while these institutions are taken on grants-in-aid list. In encouraging private effort the future finance implications have to be kept in view the roles of taking the institutions on the grants-in-aid list should be rationalised and made stringent and difficult, so that the community continue to play a significant role in providing necessary funds required for the improvements and development of these institutions.

(vi) State Governments may also encourage the levy of special education cess and increase in the rates of such cess on all urban property owners, and on other selected items in rural areas such as on market transactions. It may be suggested that at least 2% of the rental value of the urban housing property should be taxed and its proceeds kept separately for the educational development of the corresponding area. Besides, surcharge may be levied on other items like entertainment, motor vehicles, electricity etc. for the improvement of educational institutions.

Some cess should be levied on the agriculture produce marketed at the time of procurement drive. In fact such cess could be thought of in regard to all levy price transactions, such as sugar, cement etc. which are subsidised today and could bear a small increase for the benefit of the community. Similarly, the industries (both large-scale and small-scale, including cottage) should also contribute in the form of the proposed educational cess for the development of the educational institutions in the areas in which they are located. Cent percent surcharge on registration and stamps duties on transfers of all properties for the purpose of utilising the same to finance education at the State level can be thought of. If necessary, the Income-Tax Laws, operating in the States and the country may have to be modified for the implementation of the proposed measures.

(vii) The possibility of getting loans for the school buildings from Banks and other financial institutions (including loans from foreign organisations) should be explored more intensify. Concerned authorities viz. Ministry of Finance and Reserve Bank of India may have to be approached for necessary changes in the rules and procedures required for getting these loans.

(viii) The scheme of loan scholarship for meritorious but poor students may be reviewed and operated through the Banking Institutions at the local level. A revolving fund of Rs.500 crores may be created and disbursed to the States on the basis of their requirements. The amount can be increased after the scheme is successfully operated with this financial arrangements, the problem of recovery from which the old scheme suffered might be mitigated.

(ix) Since Education sector produces human resources required by other development sectors, it is desirable that the user sectors should pay for the services rendered by the education sector. Manpower cess may be levied on the industries requiring skilled manpower personnel. Public sector undertakings and private industries

should in charge of their social responsibilities to assist the programme of Adult Education for their workers and in the provision of Elementary Education for the children of their employees.

(x) Selected programmes of rural development for removal of poverty and unemployment such as NREP, IRDP and ICDS should be closely linked with the education development programmes, area wise. These sectors should set apart a proportion of their budget for the programme of educational development, particularly at the elementary stage and adult education. Even for the successful implementation of the rural development programmes like NREP, IRDP etc. educational programmes, which aim at creating awareness and literacy would be very helpful and sometimes a precondition.

CHAPTER XVII

FINANCIAL OUTLAYS

Against the Sixth Plan outlay of Rs.2524 crores for educational development programmes, the various Working Groups have suggested an outlay of Rs.15,425 crores for the Seventh Plan, which is about six times the outlay in Sixth Plan. The outlays recommended by the working Groups for various sub-heads are given in the table below:

Subhead-wise Outlay on Education during 1980-85

(Rs. in crores)

Sub Head	Sixth Plan (1980-85)				Seventh Plan (1985-90)			
	Centre	States	Total	%age of Total	Centre	States	Total	%age of Total
1	2	3	4	5	6	7	8	9
1. Elementary Education	54	851	905	36	757	5121	5878	38
2. Secondary Education	28	370	398	16	289	1469	1778	12
3. Teacher Training	-	22	22	1	153	257	420	3
4. Adult Education	60	63	123	5	772	593	1365	9
5. University Education	289	197	486	19	1174	550	1724	11
6. Technical Education	168	110	278	11	1091	784	1875	12
7. Art & Culture	51	33	84	3	280	189	469	3
8. Physical Education Sports and Youth Welfare	25	69	94	4	671	170	841	5
9. Educational Technology*					277	-	277	2
10. Development of) Languages)					75	6	81	1
11. Book Promotion)	60	69	129	5	30	-	30	neg.
12. Scholarships)					126	-	126	1
13. Libraries)					526	-	526	3
14. Educational) Administration)					10	40	50	neg.
T o t a l	735 (29)	1789 (71)	2524 (100)	100	6241 (43)	9199 (57)	15440 (100)	

* Included under elementary and secondary education during Sixth Plan.

During the Sixth Plan 29 per cent of the outlay for education was provided in the central sector. The Working Groups have recommended 43 per cent of the total outlay for education in the Seventh Plan for central sector. The share of the centre would particularly rise in the field of elementary education, adult education, educational

technology, vocationalisation of secondary education and teacher training which have accorded priority in the approach document. While the outlay for elementary education as proportion of the total outlay recommended by the Working Group is almost the same as in the Sixth Plan, the proportion for adult education is proposed to be doubled. The share of secondary and university education of the total education would also decline and it will increase in respect of educational technology for which there was little amount in the Sixth Plan and various other miscellaneous programmes. The final outlay which may be finally available for education in the Seventh Plan is not known as yet. The inter se priority which may be accorded to different subheads under education in case the outlay for education is reduced may be indicated by the Steering Group and statement indicating further details of the outlays recommended by the Working Groups for various programmes is enclosed.

**Seventh Plan Outlay for Education Recommended by the
Working Group - Summary Statement**

(Rs in crores)

Subhead/Main Item	Centre	States	Total
I. Elementary Education			
1. Pre Primary Education	4	7	11
2. Expansion of elementary Education			
i) Formal	43	2100	2143
ii) Non formal	600	336	936
3. Teacher Training			
i) Pre-service	-	47	47
ii) Inservice	163	160	323
4. Quality Improvement	100	130	230
5. Incentives	--	150	150
6. Buildings	-	2156	2156
7. Equipment	-	162	162
8. Others	10	80	90
Total Elementary	920	5328	6248
II. Secondary			
1. Expansion			
i) Formal	-	1047	1047
ii) Non formal	-	16	16
2. Teacher Training			
i) Pre-service	-	10	10
ii) Inservice	-	40	40

(Rs in crores)

Subhead/Main Item	Centre	States	Total
3. Vocationalisation of Secondary Education	178	126	304
4. Quality Improvement	29	-	29
5. Incentives	67	-	67
6. Buildings	-	240	240
7. Equipment	-	60	60
8. Others	15	-	15
Total Secondary	289	1539	1828

III. University Education**1. Expansion and Development**

i) Formal	330	335	665
ii) Non formal	100	-	100

2. Quality Improvement	465	200	665
3. Incentives	15	15	30
4. Building & Equipment	250	-	250
5. Others	14	-	14

Total University	1174	550	1724
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IV. Adult Education

1. Expansion	692	428	1120
2. Quality Improvement	-	80	80
3. Others	80	85	165

Total Adult Education	772	593	1365
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V. Technical Education

1. Expansion	17	250	267
2. Quality Improvement	1006	384	1390
3. Building	68	150	218

Total Technical Education	1091	784	1875
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VI. Educational Technology	277	-	277
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VII. Development of Languages

1. Expansion	24	6	30
2. Quality Improvement	35	-	35
3. Others	16	-	16

Total Languages	75	6	81
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(Rs in crores)

Subhead/Main Item	Centre	States	Total
VIII. Book Promotion	30	-	30
IX. Scholarship	126	-	126
X. Educational Administration	10	40	50
XI. Arts and Culture			
1. Archaeology	40	60	100
2. Museums	145	80	225
3. Tibetan and Buddhist Studies	10	2	12
4. Others	85	47	132
Total Arts and Culture	280	189	469
XII. Physical Education, Sports and Youth Services			
1. Physical Education	207	-	207
2. Sports and Games	334	100	434
3. Youth Services	130	70	200
Total Physical Education, Sports and Youth Services	671	170	841
XIII. Libraries	526	-	526

Appendix I

Members of the Steering Group on Education, Culture and Sports

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|----|---|---|----------|
| 1. | Smt. Serla Grewal
Secretary,
Ministry of Education & Culture
Shastri Bhavan,
New Delhi. | - | Chairman |
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Special Invitee

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Ministry of Education & Culture
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| 5. | Dr. P.L. Malhotra,
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Shastri Bhavan
New Delhi. | Member |
| 7. | Shri Ravinder Kumar
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| 8. | Dr. Lokenath Bhattacharya
Director
National Book Trust
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New Delhi. | Member |
| 10. | Shri O.P. Ghai,
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Federation of Indian Publishers
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| 11. | Dr. Kala Thairani
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Ministry of Education & Culture
Shastri Bhavan, New Delhi | Member-Secretary |

Appendix X

Members of the Working Group on Art & Culture
for the Seventh Five Year Plan

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| 1. | Shri Mohan Mukerjee,
"Shyamoli"
Bhawani Singh Marg,
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| 2. | Dr. D.P. Aggarwal
Physical Research Laboratory
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Ahmedabad. | Member |
| 3. | Dr. O.P. Aggarwal,
Project Officer
National Research Laboratory for
Conservation of Cultural Property,
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| 4. | Shri Ashok Vajpeyi,
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Sahitya Akademi,
Rabindra Bhavan,
Ferozeshah Road
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| 6. | Dr. Loke Nath Bhattacharya,
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National Book Trust,
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New Delhi. | Member |
| 7. | Mrs. Jcya Biswas,
Member,
Indian National Commission for Unesco,
R-19, Old Ballygunj Road,
Calcutta-700019. | Member |
| 8. | Shri S.C. Biswas,
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Central Secretariat Library,
Shastri Bhavan, New Delhi. | Member |

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| 9. | <p>Prof. B.N. Goswami,
 Department of Fine Arts,
 Punjab University,
 Chandigarh.</p> | Member |
| 10. | <p>Shri K.K. Hebbar,
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 Ferozeshah Road, New Delhi.</p> | Member |
| 11. | <p>Shri J.P. Das,
 226-West Kidwai Nagar,
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| 12. | <p>Shri Swami Lokeshwaranand,
 Institute of Culture,
 Rama Krishna Mission,
 Golpara,
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| 13. | <p>Shri Man Mohan Singh
 Financial Adviser,
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 Shastri Bhavan,
 New Delhi.</p> | Member |
| 14. | <p>Dr. V.K. Narayana Menon,
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 Sangeet Natak Akademi
 Rabindra Bhavan,
 Ferozeshah Road,
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| 16. | <p>Dr. R.K. Perti,
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Shri K.K. Hebbar	Member
Shri B. Bhattacharya	Member
Shri Ashok Vajpei	Member

3. **Sub-Group on Archaeology**

Mrs. D. Mitra	Convener
Shri B.K. Thaper	Member
Shri H.D. Sankalia	Member

4. **Sub-Group on Libraries, Archives and Information Science**

Shri S.C. Biswas	Convener
Prof. A. Das Gupta	Member

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&
Shri B.N. Swarup (from 1st May 1984)
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| 2. | Shri S.K. Chaturvedi,
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Department of Sports,
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| 3. | A representative of the Sports Authority
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| 6. | Shri Brijeshwar Singh,
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| 7. | Prof. Ranjit Bhatia,
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| 8. | Shri A.N. Bhardwaj,
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Gandhi Nagar (Gujarat) | Member |
| 9. | Brig. (Retd) B.P. Bhalla,
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| 10. | Shri T.L. Barua,
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| 11. | Secretary
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| 12. | Secretary
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| 23. | Shri M. Robson,
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| 24. | Shri J.C. Saxena,
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Members of the Sub-Groups

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| 5. | Prof. Ranjit Bhatia | |
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| 8. | Shri T.L. Barua | |
| 9. | Dr. Jagdish Narain | |
| 10. | Shri P.R. Chauhan | |
| 11. | Shri B.S. Gill | |

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| 6. | Representative of Ministry of Health | |
| 7&8. | Representatives of Yoga Institutions | |
| 9. | Shri J.C. Saxena. | |

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6. Dr. (Miss) Anmiti Desai
7. Shri V. Rama Rao
8. Director Youth Services Karnataka
9. Shri B.S. Gill
10. Shri M.R. Kolhatkar) Ministry of
11. Shri P.K. Patnaik) Education

**Members of the Working Group on Modernisation of Library Services
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