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NATIONAL EDUCATION POLICY

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1998–2010

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GOVERNMENT OF PAKISTAN
MINISTRY OF EDUCATION, ISLAMABAD

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MINISTRY OF EDUCATION
ISLAMABAD

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1. INTRODUCTION

NATIONAL EDUCATION POLICY
1998 - 2010

1. INTRODUCTION

1.1 Education is a basic Human Right. It is the commitment of the Government to provide free secondary education to the citizens. Accordingly, promotion of education has always been a matter of concern for our policy makers and successive regimes in Pakistan remained conscious of the importance of this catalyst of social change and demonstrated their zeal, when and where they could, for the expansion of educational opportunities in the country by introducing/ implementing their respective policies. However, the results of all these efforts are both encouraging and disappointing.

1.2 In reality, the system of education has advanced timidly notwithstanding the ambitious proposals by various governments. Hence, on the eve of 21st century, Pakistan would have not yet succeeded in universalizing basic education and still would be struggling with serious problems which are inherent in the system such as drop-outs, mass failure of students at different levels, and low quality of teaching. The devastating proportion of illiteracy of the Pakistani population is further accentuated by the system's inertia because 5.5 million children of the relevant age bracket are never enrolled in schools. The problems plaguing our educational system are multi-dimensional like population explosion, lack of resources, non-participation of private sector, scarcity of qualified man-power, inconsistency in the policies of various regimes, political instability, inefficient educational management system, wastage of resources, and poor implementation of policies/ programmes etc.

1.3 Resultantly, as we stand on the threshold of twenty-first century, the scenario is not very bright. There still remain many tasks which require our immediate attention in this vital area, if we wish to keep abreast with the fast changing world of today. In times to come, education and education alone will determine the place of a country in the comity of nations. Education is now the recognized catalyst of change and the force of future, without which effective participation in the life of modern world is unimaginable. Taking cognizance of this dismal situation, the present regime has accorded extra importance to this significant tool of societal change in its manifesto which states:

- Every child of six to twelve year age group will be in a school within five years, thus attaining Universal Literacy in 15 years.
- The quality of education will be improved and made more relevant to the demands of the available job market.
- Examination system will be reformed to eliminate the evil of cheating and tampering with the results.
- Each District and major Tehsil will have a Model School providing high quality education.

- All private schools will be encouraged to take a percentage of students belonging to low income group and give them free education.
- Female education will be given greater emphasis in rural areas.
- The number of students in colleges and universities studying theoretical subjects will be rationalized in line with the available job opportunities.
- University education will be brought in line with international standards.
- Research, development and scientific education will be modernized.
- Vocational training and apprenticeship schemes will be introduced in every district.

1.4 In order to fulfil the promises made in the manifesto pertaining to education, the Government has devised Education Policy for 1998-2010 aiming at obliterating the rampant ills of our education system. This Policy prescribes the ideals and goals for preparing foundation of a reformed educational system which will make it possible for us to stand on our feet in the fast changing socio-economic scenario of the world.

1.5 Education and literacy are not isolated phenomena, rather these are interrelated and complementary to each other. The prevailing illiteracy rate of 61%, especially among the parents, is one of the stumbling blocks in the promotion of education in the country. The present government attaches the highest priority to the elimination of illiteracy from society as we stand internationally committed to Universalize Basic Education for all children, youth and adults by the year 2000. Accordingly, Prime Minister's Literacy Commission (PMLC) has been entrusted the assignment of accomplishing this task through non-formal basic education approach, and as per the enhanced programme, the PMLC would open 75,000 new non-formal basic education schools by the year 2002. Moreover, the "Compulsory Primary Education Act of 1962" will be suitably amended and enforced by the Provincial Governments in letter and spirit. Similarly, the "Literacy Ordinance (Amendment)Act, 1987" would be enforced by notifying the date of its commencement in the Gazette of Pakistan.

1.6 Keeping in view the reality of the situation, universalization of primary education by year 2010 is the corner stone of this education policy. The first priority for primary education is to increase the learning of children in school, so that most children who are enrolled in schools actually complete the primary cycle. The second aim is to provide access to school to all school-age children. In order to achieve the target of UPE, 40,000 new formal primary schools will be established during the policy period. Besides, evening shifts will be started in 20,000 schools and 20,000 Mosque schools will be set up.

1.7 The secondary stage of education constitutes an important vertical link with other tiers of education. It is the finishing ground for a substantial number of students who cannot reach college level and have to be absorbed in the economy. It is, therefore, imperative that secondary education should reflect quality and practability. Unfortunately, the quality of our secondary education is conspicuously lower than international standards. This deficiency is more apparent in the teaching of science. For enhancing the existing participation rate of 31% at secondary

level to 48% by the year 2002, the policy provides establishment of additional 15,000 middle schools and 7,000 secondary schools during the next five years. Similarly, 15,000 fresh teachers would be recruited for middle and secondary classes during this period. For qualitative improvement of education, the Policy provides setting up of one Model Secondary School at district level, revision of curriculum upto secondary level by the year 2000, establishment of Education Service Commission for the recruitment of teachers' and issuance of Education Card for the deserving students.

1.8 The picture of vocational and technical education in the country is also not a happy one. To start with, very few fields of technical education are covered as compared to the diversified needs of the age. The number of vocational schools and polytechnics is very limited, while the number of those seeking admission to these institutions is very large. To cope with the ever increasing demand of vocational and technical graduates, the Education Policy envisages to enhance the enrolment in polytechnics from 42,000 at present to 62,000 and in vocational and commercial institutes from 32,000 to 43,000 by the year 2002. Besides establishment of new institutions, evening shift will start in some of the existing institutions, while vocational stream at matriculation level would be introduced in selected high schools across the country. Similarly, curricula for various technologies would be revised to accommodate the requirements of the industry and modern sensitivities. Linkages between the institutions and industry shall be strengthened according to the requirements of the job market.

1.9 Despite the explosion of computer knowledge the world over, the least importance is given to the incorporation of computer education in our educational system. The Education Policy of 1992, for the first time, emphasized initiating computer education programmes in our schools and colleges. Accordingly, computer studies as a subject has been introduced at secondary level of education. Attaching further importance to this emerging discipline, new Education Policy stipulates to introduce the subject of computer science as an optional subject at higher secondary and degree levels. Moreover, the concepts related to computer education in the new curricula would be introduced at middle stage education, as well. Similarly, computer education will be a compulsory component for all training programmes in the education sector. In addition to it, incentives in the form of matching grants will also be provided to the private sector to open high quality training and research institutes for imparting computer education.

1.10 The Higher Education, in professional and general universities is functioning in isolation. The Research in action, is not actively related to the economic growth of the country. The strength of qualified staff is declining as the salary structure and facilities in the universities do not compare favourably with those available in the private sector. The participation rate at the Higher Education level is 3%. The dual problem of making higher education accessible, while retaining the element of selectivity has to be addressed simultaneously.

1.11 The curriculum in higher education has to be drawn out of its present isolation. The current needs of society and the challenges of 21st century have to be given cognizance if Pakistan has to enter the new century with dignity and honour.

1.12 The Policy (1998-2010) aims at increasing access and raising quality in all sub-sectors of education. The two terms will have different connotations at different stages.

1.13 Major innovative programmes proposed in the said policy are as under:

i. Non-Formal Basic Education Community Schools;

ii. Use of Mosque School for the formal primary education;

iii. Introduction of evening shift at primary level;

iv. Provision of Education Card to Needy Students;

v. Develop an incentive tied approach and provide encouragement to Private and Foreign Investment in the field of education;

vi. Introduction of Nazra Quran from class I to VIII and teaching of Holy Quran with Translation at Secondary Level;

vii. Setting up one Residential Model Secondary school in rural setting, initially one at each District level;

viii. Relating education to the world of work by helping the students to identify their career or vocation, and establishing technical schools throughout the country;

ix. Introduction of competitive Text Books at Secondary School level;

x. Introduction of National Education Testing service from the forthcoming academic session, initially for admission to professional colleges;

xi. Introduction of major reforms in examination system through legislative enactments, providing adequate safeguards to tackle boldly in order to eliminate the malpractices and use of unfair means in the examination system at all levels;

xii. Introduction of Bachelor of Education in Technology at National Institute of Science & Technical Education;

xiii. Expansion of women Polytechnic colleges at district level.

xiv. Expansion of facilities for Bachelor of Education in Science throughout the country;

xv. Package of incentives for teachers to attract better talent.

xvi. Decentralization and Community Mobilization;

xvii. Introduction of Matric (Tech) stream at Secondary level;

xviii. Three year B.A./B.Sc. (Hons) course parallel to two years degree course;

xix. Creation of Monitoring and Implementation Cell under the Federal and Provincial Education Ministers.

2. AIMS AND OBJECTIVES: EDUCATION FOR 21st CENTURY

2. AIMS & OBJECTIVES OF EDUCATION FOR 21st CENTURY

2.1 The prevalent system of education in Pakistan has created an acute disenchantment among the youth, because the education output does not always match with the job markets. The recent years have witnessed fundamental changes in the economic labour market which is growing more around industrial sophistication with an emphasis on new skills and disciplines. Our system neither caters to the needs of changing demands in enhancing employment opportunities, nor makes society more humanistic. In a world of hardship and chaos, there would be little sympathy for educational approaches not suitable to lead to affluence and satisfaction. The education as a whole has to be humanistic and egalitarian to share resources, skills, and provide services to less advantaged sections of the society.

2.2 The identification of alternative features in education has become imminent. However, it is impossible to predict a single most probable course of action in the coming years due to unpredictability of its human component. These considerations have prompted the government to reshuffle the priorities, restate the policy, revise the strategy and re-examine the fabric of education. This would make the education system compatible with the demands of economic activity and lead to an egalitarian Muslim society.

2.3 A large number of proposals on educational parameters were received from public including intellectuals, educationists, lawyers, scientists, newspaper editors, teachers, and other cross sections of society. The proposals so far received, have been incorporated in the policy and will lead to the development and implementation of educational programmes from which the nation will draw inspiration to march respectfully towards the 21st century. The main priority area includes basic education which consists of universal primary education and increasing the rate of literacy. With the increased enrollment and completion rate at primary level, the base of secondary education will be extended and diversified through the provision of technical and vocational education at school level. The access to higher education will be enhanced without any compromise to quality of output. The dilemma of quality with ever-increasing number of students poses a serious challenge but the policy has set the parameters to improve the quality of education at all levels i.e. primary, secondary and tertiary.

2.4 The approach to education has to be integrated instead of compartmentalized because the education philosophy in the 21st century will be moving from specialization to generalization. This is not to undermine the importance of specialization in the different disciplines and at different levels, but generalization means more emphasis on broad based self learning, integrated development of knowledge, skills, and their utilization for the "greatest happiness of the greatest number". This can possibly be achieved through a training of self development so as to prepare the individuals for the rapid socio-economic changes and equip the students to cope with the emerging, and somewhat complex and uncertain future. The process of self development must include, self learning, self analysis, and working more in a cooperative spirit than in isolation.

2.5 The future education may embody the qualities needed for a unified, productive and self reliant society and the growth of a more human, and caring society. The main question is how to make education humanistic and what kind of policies and programmes could be chalked out to meet the educational demands of varied groups. This requires a specific as well as practical review of the existing development in the discipline of education, so that some tangible results can be achieved. For future education, the emphasise will be on what is plausible, with less emphasis on what is possible, and still lesser on what is only conceivable. Changing our system of education to more positive humanistic and egalitarian direction is not only a good thing but also a necessity.

2.6 A new approach to education is imminent which includes development of those attitudes conducive to strengthen ideological foundations of the country and improve an overall high quality of life. The priorities of parents to obtain government jobs should shift to realistic and tangible targets leading to improvement in quality and pattern of life for their children. This needs to be inculcated through parent orientation at community level. Training is specially needed for educational planners, administrators, practitioners and above all teachers, not through stereotyped routine courses but specially designed courses to take a realistic view of education. Education should identify short and long term social indicators for the future development of society. These indicators will be used as detectors to determine whether the direction to achieve our policy objectives are correct or not. In case of failure, these may be modified accordingly.

2.7 The scope of further education has to be extended outside the traditional classroom which includes the entire life span of an individual to make him a more useful and productive member of society. This attitude of life long education has to be inculcated from the beginning. This challenge will require that such teaching and training methods be developed which are most likely to prepare students both for further studies and for employment, mostly self employment.

2.8 The training to inculcate a sense of inquiry is almost missing in our educational set up. This training infuses a spirit of inquiry and a questioning mind with a widened horizon. It also provide premises for self analysis and some guidelines to critically examine the system which may be suffering from socio-economic disparities and inequalities. Education has a clear role to play in providing an inquiry oriented training to the clientele.

2.9 The present policy has major focus on the future of education in this country and envisages following main objectives:-

2.9.1 Policy perceives the determination of the government to introduce Islamic order as one of the vital and important areas. It will present a strategy which should enable the students to understand the message of the Holy Quran, imbibe the spirit of Islam and appreciate it in the context of new scientific and technological advancements.

2.9.2 Basic education for all shall be pursued not merely as a sectoral target but as an integral part of human development plan. The ultimate aim is to eliminate disparity, and the drama of under development.

2.9.3 Policy proposes to attract private finance by shifting adult education programme to NGOs to be supported through incentive grants from provincial and federal governments and education foundations.

2.9.4 Another major proposal will be to introduce a strategy to remove inequalities by providing more academic and vocational higher schools in rural areas. There will be increased access of general and vocational education to females through a wider spread of educational facilities. The blend of non-formal and distance education based on new education technology and expansion of the non-government sector through financial incentives and motivation campaigns through print and electronic media, will form the basis for the parameters of this policy.

2.9.5 The basic and fundamental role of the provinces and local governments will be identified in this regard to propose measures which may enable the provinces to perform their role more effectively, positively and efficiently. The federal government will monitor and evaluate the process of policy implementation.

2.9.6 Policy proposes the establishment of two types of school systems: the academic High School and vocational technical High School, each with 12 years of schooling (Higher Secondary). It also proposes the shifting of classes XI and XII from the colleges to the general schools and vocational schools. The vocational schools would concentrate on agricultural, technical, commercial, and biomedical education. This will be done in a phased manner over a period of ten years.

2.9.7 Policy proceeds to delineate initiatives for a pragmatic target flow of students to the school system, and for asserting quality measures which hopefully will lift the system to a respectable level of excellence during its growth in the next 10 years . The raising of the collective ego of the nation through a facilitated, efficient and effective educational system remains the primary goal of this policy.

2.9.8 Policy fully recognizes the contributory role of higher education in economic development and proposes new initiatives for:

i. Expanding the base and improving the efficiency of higher education.

ii. Strengthening the existing graduate study programmes.

iii. Improving the delivery system.

iv Expanding the capabilities of the universities for creating new knowledge

v. Enhancing the entrepreneurial role of the universities.

2.9.9 Policy provides guidelines for intimate association of teachers and scholars with the process of educational reconstruction. There is little hope of advancing the quality aspects of education unless the teacher is committed to the profession and is also given honour and recognition in society.

2.9.10 Policy parameters provide for improving the corporate life of students on the campuses and suggest several measures for depoliticizing the campuses and regulating the conduct and behaviour of students as demanded by the norms of university culture. The reform of existing evaluation system will be done through National Testing Service. The new professionally structured testing service will cause improvement in the examination systems and will at the same time strengthen the principle of merit based selection.

2.9.11 Policy parameters suggest several types of innovations for diversification so as to transform the system from supply orientation to demand orientation. (a) The horizontal exit of the educated youth to the job market from various educational levels is a strategy proposed for increasing the employment opportunities and for reducing overcrowding at the university level. (b) In the past, several scholarship schemes were launched by the government to train teachers, Educational Planners and Managers, in different institutions of academic excellence across the world. This was possible when the money crunch was less. The situation now demands that we should capture the talent and experience of those Pakistanis who have excelled in academics and research, but are working abroad. They should be invited on assignments in Pakistan to train a large number of persons with much less cost. (c) One element of egalitarian society is that school should be used as an agent for social change. This will require a radical qualitative change in the school environment and at the same time access to school for disadvantaged and poor has to ensured. The innovation in this regard will be the introduction of education card at school level for needy students. (d) The Nazra Quran from class I to VIII is a part of curriculum but now study of Quran with a translation at secondary level will be made compulsory. This will enable the students to understand and comprehend the Message and the spirit of Holy Quran.

2.9.12 Some other measures proposed by the policy include: improvement in the internal efficiency of higher education institution, rationalization in fee structure, recovery of user charges, resource generation by the universities through promoting their entrepreneurial role, increased allocations from Iqra fund, and attraction of private finance for post primary levels of education.

2.9.13 The policy considers the curriculum as a central covenant of educational development and calls for bold reforms. These include: starting a new cycle of curriculum development at all levels of education by professionals, who are trained in the science of curriculum development; bringing about cognitive compatibility between one level of curriculum and the next; eliminating unnecessary over crowding of subjects in the curricula and allowing the production of competetive textbooks in the private sector with the possibility of different books to be prescribed by different institutions.

2.10 Education has been used as a change agent in all societies but the dilemma in our context is that we are inclined more to use education to perpetuate tradition. This is not to undermine our proud heritage of Islamic values but to sharpen its philosophical concerns to fulfil the future needs.

2.11 The emphasis in our educational set up so far has been, on 'what to know' but in future it will be changed to "how to know". This has become necessary in view of the advancement of knowledge and the massive literature generated in recent years.

2.12 The re-examination of values and perceptions should be facilitated by the educational environment. This will require different types of institutions where knowledge will be advanced in a conclusive atmosphere and key element will be the freedom of thought and expression of the teacher's mind and the learner's. This implies significant departure from traditional administrative patterns to more enlightened and flexible set of regulations and procedures. This does not mean only the re-examination of values in content but to analyse our evaluative experiences and identify ways conducive to learning, to be free to adopt a new response pattern or perception.

2.13 The philosophy of integration and demand for national unity will be heightened with increased emphasis to respond to the general insecurity of the individual in highly technological, industrial and materialist society. The future education must seriously take this into consideration that national unity becomes a driving force for national development.

2.14 The future education will be more useful if we induct the following areas in the discipline of education: Education for preparing the individual and society to cope with an uncertain future and complexities; education to meet the demand of varied groups with an emphasis on disadvantaged sections of society i.e. minorities, females, rural area inhabitants, residents of urban slums, nomads, etc.; education to inculcate national identity for strengthening the security of the country and suggesting a positive and pragmatic relationship between education and law enforcement agencies.

2.15 The future education institutions will have the following orientation:-

i Lecture Methods will be replaced by guidance provided through the use of new technologies such as computers, TV, satellites and video tapes;

ii Institutional life will be less formal and more humanizing;

iii Productive work and problem solving skills will take the place of routine type of activities.

2.16 The Future Training Strategies will include the following guidelines:-

i Training will emphasize on creativity and productivity.

ii Development of professional competencies through updating knowledge and skills.

iii Teaching will be replaced by learning and the teacher and student role will change from dispenser - receiver practices to a joint partnership in the learning processes.

iv The multiplier effect of training and the self learning modules will become necessary ingredients of any programme.

v Professional advancement will be a continuous process through upgrading skills on the job training.

2.17 The measures taken to meet the needs of future student will focus on:

i Student will have adequate opportunity to learn at his/her speed of mental and physical development.

ii Choices of subjects/disciplines will be much wider and diversified to fulfill the needs of individual students.

iii Education will effectively be imparted outside the school which will provide opportunities to work for longer duration on a job.

iv Education will be designed in such a way so as to provide more independence in thinking process.

2.18 To recapitulate, the educational reforms, proposed in this policy, aim at bringing about a social change as dictated by the teaching of Islam, universalizing primary education, improving the quality of education, increasing literacy rate to 70%, unleashing the energies of the nation for participation in nation building pursuits, inculcating high moral, ethical and civic values amongst students. The policy will streamline the management , monitoring and evaluation of educational programmes, shift education focus from supply to demand-oriented study programmes, and create an overall operational framework, as well as environment to achieve policy objectives.

3. ISLAMIC EDUCATION

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3.1 Conceptual Framework

3.1.1 Educational policy and particularly its ideological aspect enjoys perhaps the most vital place in the socio-economic milieu and moral framework of a country. Countries of the world, in order to build their future, evolve national policies reflective of their vision of the future, and take steps for development of human resources needed for realization of that vision. Pakistan has a unique position on the map of the world. We are not a country founded on its territorial, linguistic, ethnic or racial identity. The only justification for our existence is our total commitment to Islam as our identity. Although the previous educational policies did dilate on Islamic Education and Pakistan ideology but those policies did not suggest how to translate the Islamic ideology into our moral profile and the educational system.

3.1.2 Pakistan is an ideological Muslim state. Article 31 of the Constitution of the Islamic Republic of Pakistan clearly points out this aspect. It requires development of an educational policy to ensure preservation, practice and promotion of Islamic ideology and principles as enshrined in the teachings of the Qur'an and the Holy Prophet (p.b.u.h.).

3.1.3 Islam is not just a matter of belief, it is a complete code of life wherein Science and Technology as well as Social and Human Sciences, economic and cultural activities, in brief, all aspects of life are to be guided and determined by the principles of the Holy Qur'an and the Sunnah. Therefore, allocation of one or more hours in a week for teaching Islamic studies, memorization of a few shorter surahs of the Holy Qur'an or reading a few passages, selected from the Holy Qur'an, without knowing their implication for life, may serve a formal requirement to satisfy constitutional needs, but it does not serve the spirit of the Constitution.

3.1.4 Progress and advancement of the countries of the world is always related with the kind of education they offer to their people . The so-called secular Western countries or the Marxist-oriented countries always make sure that their ideology is fully reflected and integrated in the educational system not only in History and Social Studies but also in Chemistry, Physics, Biology, International Relations and other disciplines. The most obvious example is that of USA, where secularism and materialism are the two sacred principles of their educational policy. It is, however, important to note that Western secular education allows, a few slots in their scheme of studies that deal with moral or religious education. This, however, does not change the basic secular feature of their educational system.

3.1.5 Pakistan is not a secular country, nevertheless, during the past fifty years, we did not dissociate ourselves from the colonial and secular concept of education, in which religious subjects are incorporated in the curricula. However, moral, ethical and religious vision is not allowed to penetrate and get fully reflected in the total educational system. While we talk about religious dimension of the new educational policy, this aspect cannot be overlooked. A disregard for relationship between our Islamic vision, ideology and educational system, will only defeat the purpose of even including Islamiyat or Pakistan Studies in our curricula.

3.1.6 For over 50 years, we have encouraged different and opposite views exclusive of each other, through our educational policies. The state, sponsored as well as private educational system, creates a secular man who does not mind visiting Masjid once a week or sometimes five times in a day, but his religious commitment is not reflected in his life style, economic, social, and cultural activities. The other world view is that of a traditional sectarian believer who regards his interpretation of religious doctrines as the only valid practice. Consequently, we have not been able to build the nation with an integrated vision and a clear direction for the future. It is high time that new educational policy should take into consideration the development of an integrated educational system in which our Islamic values, principles and objectives must be reflected not only in the syllabi of Islamic studies but also in all the disciplines. The policy should be followed strictly by all the institutions in public and private sectors. No one can deny the fact that a large number of private institutions in our country, is creating a generation of future administrators, businessmen, social workers, bureaucrats, political leaders, and educationists who have no idea about the social reality or ideological foundations of our country. Many of our students know graphic details of streets in England and New York through books they read, while they have no idea about their own cities, their cultural values, moral traditions, and even their own conventional landmarks.

3.1.7 Aqidah (one's conviction and faith) in Islam is not a matter of blind belief. It calls for the use of analytical faculty (Shu'ur and tafakkur) to be actively applied and after proper analysis to be translated into one's everyday life. This anti-dogmatic approach of Islam is inculcated through the Qur'anic and the sunnah paradigm of education. Unfortunately, the dualistic vision of life, in which religious and secular realms of knowledge are clearly marked into dunya and deen, secular and the sacred, is even recognized by several classical Muslim scholars. They interpret religious sciences i.e. ulum-ud deen as a matter of "belief", while worldly sciences i.e. ulum ud-dunya as a mundane, imperial activity. This approach needs to be empirically examined.

3.1.8 The Islamic epistemic change, at a personal level, leads to a qualitative change in one's social life. Economic, political, legal, and cultural aspects of the society are also remodelled on the foundation of a well-reasoned Islamic epistemology.

3.1.9 The importance of knowledge and culture in Islam is fully reflected in the Qur'anic ayah, "My God, increase my knowledge" (Al-Qur'an 20:114) and the Prophetic tradition " seeking knowledge is an obligation on all Muslims". One of the paramount attributes of Allah is His transcendent knowledge "Lo! your God is Wise, and Aware" (Knowledgeable) (Al-Qur'an 6:83). It is essentially knowledge and volition which makes the human elevated over the angels. This is why perhaps, the angels were asked to bow down to recognize transcendence of knowledge and to offer their cooperation to man in his volitional activities. "And We created you, then fashioned you, then told the angels: Fall you prostrate before Adam, and they fell prostrate, all save Iblis.." (Al-Qur'an 7:11).

3.1.10 That a knowledgeable person is superior to one who does not know, is underscored by the Qur'an in many places. "Allah will exalt those who believe among you, and those who

have knowledge to high ranks. Allah is informed of what you do. "(Al-Qur'an 58:11). This centrality of knowledge and creation of a culture of knowledge appears to be the social norm of Islam. It rejects the unscientific thinking in its many forms, and places knowledge as the valid basis for social stratification; "Say unto them O, Muhammad are those who know, equal with those who know not? But only men of understanding will pay heed" (Al-Qur'an 39:9). It condemns with all possible force, attribute of dogmatism, skepticism, and agnosticism.

3.1.11 Islam wants an attitude of critical thinking and deep knowledge. " And the believers should not all go out to fight. Of every troop of them a party only should go forth, that they (who are left behind) may gain sound knowledge in al-Deen and that they may warn their folk when they return to them, so that they may beware". (Al-Qur'an 9:122).

3.1.12 Development of clear thinking is a virtue encouraged to be inculcated among the believers. "Such as remember Allah, standing, sitting and reclining and consider the creation of the heaven and the earth (and say) our Lord, you created not this in vain". (Al-Qur'an 3:191). The universe and all that in it, is presented as subject matter for man' s contemplation, critical thinking, and meditation. "And He it is Who spread out the earth and placed there in firm hills and flowing streams and of all fruits, he placed therein two spouses (males and females). He coverth the night with the day. Lo! herein verily are portents for people who take thought" (Al-Qur'an 13:3). In the following ayah in place of ley qawmin yatafakarun, it uses ley qawmin ya'qilum "people with reason, aql, or intellect" (Al-Qur'an 13:4).

3.1.13 These and many other references in the Qur'an refer to those who seek knowledge, who conduct research, investigate, explore, interpret, introspect and reason out. This shows that Islami vision of human conduct is based on a conscious rational and meaningful volitional behavior. In short, it leaves no room for a dogmatic way of life.

3.1.14 That man must seek knowledge from all possible sources, revelation, nature, life as well as from others, who know and have wisdom, is an Islamic value. " And we sent not (as of our messengers) before you other than men on who We revealed. Ask those who know if you know not." (Al-Qur'an 16:43 and 21:7). The Qur'an also refers to the sense of ethical responsibility, consciousness and knowledge which Allah creates in the personality of a scholar. The empowerment through knowledge should not make a scholar proud and arrogant. It should create in him tenderness, responsiveness and benevolence. "The erudite among His bondsmen fear Allah alone...."(Al-Qur'an 35:28). Needless to say that the Qur'an highlights the superiority of persons with knowledge over the others "Say unto them O, Muhammad, p.b.u.h. wasallam are those who know equal with those who know not? But only men of understanding will pay heed. "(Al-Qur'an 39:9).

3.1.15 It appears that education without purpose is not the be-all and end-all of every thing. Education like art must also have a purpose. While knowledge is empowerment, a purposeless empowerment tends to be a form of tyranny. While knowledge is power, the problem with aimless power is that it corrupts absolutely. In the Qur'anic paradigm, *Iblis*, later on given

a qualitative name Satan, was not an ignorant person. It was his egotism, self-conceit, and pride in excellence in knowledge which made him arrogant and rebellious enough to be condemned for ever. Similarly, *Abu Jahal*, another character in history was not an illiterate and uneducated person. It was his arrogant denial of the obvious truth which earned him the title " Abu Jahal" (father of ignorance).

3.2 Objectives

Specific objectives of Islamic Education are:

3.2.1 To fulfil the requirements of Objectives Resolution and section 31 of the Constitution of Islamic Republic of Pakistan saying that education and training should enable the citizens of Pakistan to lead their lives according to the teachings of Islam as laid down in the Qur'an and Sunnah.

3.2.2 To evolve an integrated system of national education by bringing Deeni Madaris and modern schools closer to each stream in curriculum and the contents of Education.

3.2.3 To educate and train the future generation of Pakistan as a true practicing Muslim who would be able to enter into 21st century with courage confidence, wisdom and tolerance.

3.3. Policy provisions

3.3.1 Islamiyat will be taught as a compulsory subject in all the educational institutions in the public and private sectors from class I to BA/B.Sc. including professional courses.

3.3.2 Nazira Qur'an will form an integral part of Islamiyat and will be completed by class VIII.

3.3.3 Teaching of the Holy Qur'an with translation will commence from class VI and will be completed by class XII.

3.3.4 The basic teachings of the Holy Qur'an will be included in all the courses of studies.

3.3.5 Pre-service and in-service training programmes for Islamiyat and Arabic teachers will be ensured. They will be given due respect and status among the teaching community.

3.3.6 To bridge the existing gulf between the formal education system and Deeni Madaris system and to eradicate sectarianism, the curricula of Deeni Madaris will be upgraded and improved to enhance prospects of employment. Necessary legislation, if required, will be introduced. Incentives will be provided to Deeni Madaris for introduction of formal school subjects and technical and vocational subjects so that their graduates could be absorbed in the labour market.

3.3.7 Their *degrees/asnad* will be equated with the formal degrees/certificates at all levels.

3.3.8 Recognition will be given to these institutions by the Government.

3.3.9 In terms of Article No. 31 of the Constitution, the preservation, promotion and practice of the basic ideology of Pakistan, making Islam as an integral part of individual and national life with the purpose of reformation and development of society on the principles of Qur'an and Sunnah will be ensured.

3.3.10 Valuable and rare books on Islam will be reprinted and distributed among Deeni Madaris for research and reference.

3.3.11 Curricula and textbooks of all the subjects, social sciences, pure sciences, mathematics, languages, technical and vocational, etc. for all the stages, primary to tertiary will be revised, so as to:

i Exclude and avoid any material repugnant to Islamic teachings and values.

ii Include sufficient matter on Qur'an and Islamic teachings information, history, heroes, moral values etc. relevant to the subject and level of education concerned.

iii Curricula of teacher education be revised and updated.

iv Ideology of Pakistan and teachings of Islam must be made an integral part of all training programmes (Pre-service & in-service etc).

3.4 Implementation Strategy

3.4.1 Islamiyat will be continued as a compulsory subject from class I to B.A. B.Sc. level including professional institutions.

3.4.2 Nazira Qur'an forms an integral part of Islamiyat compulsory for classes I-VIII. Islamiyat and Arabic have also been offered as elective subjects from class IX onwards. Arabic and Holy Qur'an with translation have been integrated and offered as a compulsory subject from class VI -VIII. The *status-quo* will be maintained.

3.4.3 Islamiyat, Arabic and the Holy Qur'an with translation will be integrated in a single subject and offered as a compulsory subject from class IX onwards.

3.4.4 The textbooks of Arabic and Islamiyat will be updated.

3.4.5 New integrated textbooks will be developed for classes IX-XII.

3.4.6 Teachers' guides will be developed and distributed free of cost among all working teachers.

3.4.7 Teacher will be considered the focal point for dissemination of information on fundamental principles of Islam as laid down in the Holy Qur'an, and as applicable to the development of an egalitarian Muslim society. For this purpose, extensive in-service training programmes will be conducted. The pre-service teachers' training curricula will have a compulsory component of Islamic education including *Uswa-e-Hasana*, Holy Qur'an Nazira with translation and principles and methods of teaching Islamic courses. This concept will be interwoven in all the subjects of training Institutions.

3.4.8 Ministry of Education will be responsible for the training of "Master- Trainers" at secondary and higher secondary levels.

3.4.9 At grassroot level, the provinces will impart training under a crash programme by utilizing the services of Master Trainers, trained by the Federal Ministry of Education.

3.4.10 Two posts, one of Qari for teaching Nazira Qur'an and the other to teach the Holy Qur'an with translation, will be created in each teacher training institution by the provinces.

3.4.11 Selected Qur'anic Ayat with translation will be included in the competitive examination and in the courses of professional colleges, training institutions, Pakistan Administrative staff College, NIPA, Military Academies and Staff Colleges etc;

3.4.12 Meaningful and useful charts on selected Qur'anic Ayat with translation will be published and provided to all schools;

3.4.13 Educational channel of PTV will be used for teaching of Holy Qur'an Nazira with translation and to disseminate information about Islamic values;

3.4.14 Institutes of Education and Research will open separate centres for undertaking research on the contents of Islamic education for inclusion in the courses at various levels, and on methods of teaching Islamic ideology;

3.4.15 Video cassettes of special lectures of high ranking Islamic scholars and scientists will be prepared and broadcast through electronic media, as well as made available to students/scholars both inside and outside Pakistan;

3.4.16 Schools and colleges, during morning assemblies and during the periods set aside for religious and moral education, will emphasise character building, high moral values, and create an environment for societal development, patriotism and discipline based on the injunctions of the Qur'an and Sunnah.

3.4.17 The work and contribution of Muslim philosophers will form a compulsory part of the teaching of curricula at appropriate levels of education.

3.4.18 In lieu of Islamiyat compulsory for Muslim students, Moral Education/ Ethics has been provided as an alternate to the non-Muslim students. *Status-quo* will be maintained. Curriculum and textbooks will be revised/ updated.

3.4.19 Deeni Madaris have an important role in the society since the early age of Islam. These were the centers of learning and education for all academic faculties. Religious and formal education was imparted through them. During the colonial rule, this system of education was relegated into background and the British system of education was planted. The Muslim scholars and Ulama patronised these institutions to emphasise Islamic Education at the time when it was not included in the formal education system. They prescribed their curriculum according to the needs of the Muslim society. Almost the same curriculum still exists with minor changes. After the creation of Pakistan it was the dire need of the Muslim Ummah to have an educational programme based on the Islamic ideology which could produce a good generation capable of handling the affairs of this newly created Muslim state according to the teachings of Islam. Some steps were taken by the Government in the past particularly in the early eighties to make use of the potential available in Deeni Madaris, but this was absolutely insufficient to fulfil the needs. The steps taken in the past were:

i surveyed Madaris and collected necessary information about 3700 Madaris.

ii reprinted 2000 sets comprising 24 textbooks in Tafseer, Hadith, Fiqha etc and distributed free of cost amongst selected Madaris.

iii released grant-in-aid to selected Madaris.

iv equated their final sanad with MA Islamiyat/Arabic.

v developed curriculum for the group titled "Dars-i-Nizami Group" comprising courses of both, formal and Dars-i-Nizami at Matric and Inter level.

3.4.20 To bring these two parallel streams together and to facilitate horizontal mobility of students with the ultimate aim of integrating the two systems, the following steps are proposed:

i. **Establishment of Deeni Madaris Board:** For establishing uniform standards of Deeni Madarssah Education through registration, standardization of curricula and examination system, equivalence of asnad, award of foreign scholarships, grant-in-aid and all other financial assistance from government side, etc. a Deeni Madaris Board will be established. All the willing Wafaqs/ Tanzeem/ Rabita and independent Madaris will be eligible for affiliation to this Board. A draft Act recently prepared by the Ministry of Education, in consultation with Ministry of Religious Affairs will be processed for legislation.

ii. **Establishment of Model Darul Ulooms:** To absorb the graduates of these institutions in the market for technical, vocational and formal educational

courses, a few model Deeni Madaris will be established by the Government under a phased programme as:

a The existing Sheikh Zayed Islamic Centres at Lahore, Karachi and Peshawar Universities, will be converted into model Deeni Madaris by introducing Dars-i-Nizami, Modern subjects and technical & vocational subjects.

b Later, on the same pattern, Model Madaris will be established at divisional level throughout the country.

iii. To integrate Deeni Madaris system with the formal education system, some formal school subjects like English, Maths, General Science, Economics, and Pakistan Studies etc. will be included in the curricula of Deeni Madaris and their asanad at Matric, Inter and graduate levels will be equated with the formal education. All the willing Madaris will be provided suitable financial assistance for payment of salaries to the teachers.

iv. All the activities made for providing incentives to Madaris like re-printing of selected textbooks and their distribution amongst the Madaris, annual grant-in-aid, imparting training to their teachers through workshops, improvement of the libraries etc. will be continued and extended. For this purpose, new development schemes will be prepared and got approved in light of the previous schemes.

v. Opportunities of pursuing higher studies for the students of Madaris, will be provided in appropriate fields of studies.

vi. The particulars of Madaris will be updated through surveys and the reports will be compiled suggesting the measures for improving the system.

vii. All the facilities and concessions available to the students of formal education will be made admissible to the students of affiliated Madaris.

4. LITERACY AND NON-FORMAL EDUCATION

4. LITERACY AND NON-FORMAL EDUCATION

4.1 Conceptual Framework

4.1.1 The International literacy year 1990 provided an opportunity to renew commitments to ensuring a fully literate world. The two principal messages of the year were (a) that literacy matters and it matters greatly and (b) that the provision of education is above all a public responsibility but there is a role for every one including private sector, NGOs, CBOs, and other allied organizations to ensure the basic human right. There is a need for grand alliance between and among the government, private sector, and donors.

4.1.2 Basic literacy and numeracy may not by themselves constitute a guarantee to a better quality of life for all but they are definitely a crucial part of individual development and social participation. However, it is an incorrect notion, that literacy and numeracy can be achieved in isolation from the social context in which they operate. This confusion has significant consequences. In developed countries we are faced with increasing evidence of the superficiality of literacy levels achieved by large sections of communities. In developing countries the spiral of literacy development is consistently swamped by the of population growth, poverty, health and problematic subsistence. However, basic literacy skills do not guarantee functional literacy and in both the developed and developing nations, the problem of relapsing into illiteracy is a significant one. Nor does functional literacy extend automatically, if there are no books to read or no willingness to do so; if there is no purpose to write; and above all, if there is no desire to change from traditional or practical methods of communication and work.

4.1.3 However, against a diversity of extreme scale in the languages, population concentrations, religions, cultures, economics and politics of Asia and Pacific, some outstanding achievements have been made. The BRAC (Bangla Desh Rural Advancement Committee) programme of Bangladesh is one good example of success but the major objection against the programme is that it is donor-driven. According to some estimates more than 90% of the money is provided by the donors which raises a basic question of sustainability of the programme on long term basis.Strictly speaking, educational systems in most of the developing countries of Asia, Africa and Latin America mainly comprise institutionalized teaching premises, narrowly identified sub-systems and rigid infrastructure for formal education. These systems are administered and managed by government authorities.

4.1.4 Conventional educational resources are limited in every society. Institutions, professional educators, teaching aids and educational technologies are a small part of real available resources for education and learning. Even in societies with highly developed resources, with universal opportunities for initial education, and with widespread colleges and powerful mass media, there is a glaring discrepancy between these facilities and real learning potentials, This is even more true in developing countries, where the majority of the population still learns in traditional environments, in a non-institutionalized way and lives largely in the oral civilization, with its own communication pattern.

4.1.5 In Pakistan, the overall strategy during the period from 1947 to 1997 has remained one of expansions of the existing system and efforts have been directed solely to the establishment of more of the already existing type of formal institutions. Thus more and more replication of the already existing model has been the major approach to the solution of the problem of education sector. After spending scarce resources we have come to the conclusion that our approach of mere expansion has been very simplistic. It has created problems associated with the unequal provision of facilities. Rich conditions of learning as they exist in a few selected institution are in sharp contrast to the total lack of basic amenities and physical facilities. Inspite of the huge investment made, the successive failure of the loud promises made in every plan and with every educational policy and putting off the well marked out dead lines, has created a credibility gap.

4.1.6 In Pakistan, the current literacy rate is estimated at 38.9 percent. It is 50 percent for males and 27 percent for females (Economic Survey 1996-97 page 115). The female literacy for rural areas is not more than 8 percent. It is estimated that the stock of literate in 1992-93 was 29.65 million while the population of 10 years and above was 83.77 million (Eighth Five year plan: 1993-98 page 315). By the year 1998 the population of 10+age group will rise to 96.69 million. The addition to the literate population during the five year (1993-98) period will be 18.83 million. The optimistic projection about the increase in literacy rate is 48% by 1997-98 which will be the completion year of the 8th plan. If we go by these then we should assume that there will be an increase of more than 2% each year in the National literacy rate. The record of the past about 50 years in Pakistan clearly speaks of 0.5 percent annual increase in the literacy rate. This does not mean that a 2 percent target of achieving annual literacy rate is impossible but what is most probable is that it may not happen, because no operational plan and pragmatic strategies have been developed except setting the targets in the official documents. The lower priority to Adult literacy was manifest from the First Five Year plan (1955-60) to the Third Five Year Plan (1965-70) when no financial allocations were made for the promotion of literacy, hence no targets were set either.

4.1.7 The Eighth Five Year Plan (1993-98) allocated Rupees 1.750 Billion (About US $ 43.75 Million) for Adult Literacy Programmes to make 16.86 million people literate. This comes to about rupees one thousand per person to become literate. For the attainment of the objectives and the targets of this policy in letter and spirit, a comprehensive plan of operation which is pragmatic, realistic, and well-monitored plan of operation should have been prepared.

4.1.8 The sociological parameters, which exist in developing countries like Pakistan, are dialectically different from those prevailing in the developed countries. The yoke of Imperialism has been replaced by the spirit of self-reliance, creativity, pride in indigenous and national achievements. The nation is on the threshold of a renaissance, hoping to enter the 21st century with vigour, strength, and pride.

4.1.9 The result of the formal institutional structure is that millions of children have been deprived of elementary education not because institutional facilities did not exist, but primary education clashed with their jobs, since it was organized only as a full time programme during

day time. Alternatives comprising part time education, evening classes, multiple point entry, non-formal education programmes for early school leavers etc. are different efficient substitutes to inefficient primary schooling patterns. In stagnated rural areas, institutionalized education has proved to be of little effect. It may be said to have been unable to promote greater vitality in production processes through agricultural training. In other words, education in this instance would not be responding to the true agricultural situation in the sense of promoting effective channels for integrated development.

4.1.10 Other factors, similarly contributing to the low level of educational efficiency and productivity in rural areas are, the poverty of families; the use of child labour; infant malnutrition; health; social and cultural situation; the high mortality and morbidity levels; and deficit housings. Moreover, the sanitary conditions; illiteracy of the students; parents and relatives; the differing values of the family; the area; and the educational establishments also add to the complexity of the situation without benefitting the masses. In spite of this situation, the school education has not taken appropriate forms of adaptation. Hence, children either do not attend the school or leave early. In many instances, the school does not promote community activities or use the existing infrastructure, and fails to associate its programmes with the community or with its various basic representative groups such as the parent associations. In short, it fails to fulfil the outstanding role expected from it by the rural communities.

4.1.11 The limitations of language employed in the educational process, the inadequacy of school calendars, deficit programming of school activities, low availability of the teaching staff and absence of mechanisms to facilitate a better use of their capabilities add to the foregoing problems.

4.1.12 The non-formal education, is now receiving a growing awareness and acceptance as a dominant approach to education of the future. The idea is certainly not a new one. The practice is almost perennial. The consciousness that learning has to be co-existent with life is as old as mankind. All traditional societies had, in one way or the other, some learning practices within all periods of one's life and as part and parcel of one's overall activities. It is only in the more recent times that learning and education became time-bound and space-bound, mostly limited to some age groups, predominantly professionalized, institutionalized and sociologically and pedagogically imprisoned. This reflects in reality the basic trends in the global evolution of our contemporary societies, which are increasingly over organized and over structured, leaving less and less scope for creativity, imagination, choice, and peoples real participation. Educational systems and learning facilities mirror the same trends and societal characteristics. They are not, and can not be, exceptions in the overall rules of the human universe. The increased emphasis on non formal learning stems from the awareness that institutionalized, time and space bound education does not correspond to the requirements of today's societies. Hence, non-formal learning concept today is more a comprehensive answer to the identified needs, based on an integral educational Philosophy, rather than piecemeal and diffused practices stimulated by working or living exigencies.

4.1.13 This emphasis comes not as a result of trends towards more and more formalized satisfaction of learning needs but as a consequence of unsatisfactory results achieved through such policies & strategies and from the inadequacy of formal schooling as the way to literacy, knowledge, understanding, cognizance skills and the capacity of dominating natural and societal forces. The major objectives of non-formal education envisaged can be grouped under four broad categories:

a. The strengthening of the cultural and national identity through the development of suitable curricula and teaching methods, the utilization of national language as the language of instruction and the introduction of relevant extra - curricular activities.

b. The integration of school with the community life through such modification in the structure, time table and the content and methods of teaching which is adapted, at each level and type of education, to the realities and development needs of the community around (rural/urban/industrial/agricultural/) with a view to promoting the pupil and students participation in the activities of the community and reciprocally the community's interest in and contribution to the school's activities.

c. The establishment of close links between education and employment. This includes; (i) the development of those structures, content and teaching and training methods which are most likely to prepare students both for further studies and employment including self employment; (ii) the development of the different levels and types of education particularly technical and higher education, through the adoption of appropriate examination and admission procedures, having regard to the estimated future manpower requirements and (iii) provision of facilities for further education and training of those who are already employed or engaged in productive activity.

d. The establishment of close links between education and socio- economic development by approaching education at all levels and all types and its development as an integral part of the national development process through the development of appropriate planning and administrative techniques, methods and procedures.

4.1.14 Transformation of the "closed" education system to the "open ended" one, is probably the minimum requirement by promoters of the non-formal concept. System without dead-ends, system where each programme is "terminal" in the sense that it leads to the utilization of acquired knowledge, and is non-terminal as each could be continued, system where the notion of failures and drop-outs loses every meaning, system which permits and encourages temporary "leave" return to work and job, are lateral issues, system promoting combination of formal and non-formal education group and self-learning as regular ways of acquiring knowledge, skills and degrees, and many similar solutions and innovations are some examples of structural changes.

4.1.15 Another direction consists of "opening up" educational institutions to the society and its needs to the nearest environment and to new categories of learners. Inspite of many generic developments, majority of primary schools are still closed institutions often alien to the community, children's parents and the requirements of the surrounding. Secondary schools and secondary school teachers are even less involved in spreading knowledge for social progress and less ready to open the doors to new categories of adolescent and adult learners. At the higher education level, alongwith trends for more "open universities", there is a growing need for "Opening up" the universities to the surrounding world and various categories of potential students. Such changes in the role and functioning of existing educational institutions, schools, and colleges, are required both in developed and developing countries.

4.2 Objectives

4.2.1 'National Literacy Movement' will be launched on emergency basis in every village, tehsil and District. All Parties Accord on elimination of illiteracy and to make the society free from Illiteracy by year 2010 will be achieved and materialized.

4.2.2 Mosques, wherever feasible, will be utilised as one of the means to provide Non-Formal basic education to increase literacy.

4.2.3 Each Province will prepare a plan of action, in consultation with PMLC, for a co-ordinated effort in the National Literacy Movement.

4.2.4 The Prime Minister's Literacy Commission which is the Premier organization entrusted with the task of raising literacy rate, will be strengthened as a Statutory Body to enable it to discharge its functions effectively within the minimum possible time. Adequate funds will be ensured to implement policy targets.

4.2.5 All the appointments in the Non-Formal Basic Education Community Schools/Centres will be made locally, in consultation with the community, without any political interference.

4.2.6 Make it mandatory for all the industrial units registered under the Factory Act to make the employees and their dependents literate. Similarly all the Federal as well as Provincial agencies like WAPDA, Pakistan Steel, Directorates of Industries, OPF, Chambers of Commerce, PTV, PBC etc shall be entrusted the same responsibility.

4.3 Policy Programmes:

4.3.1 Democratization of education, through the expansion of elementary education both through formal and non-formal methods, and expanded programmes of adult education, literacy and functional literacy programmes, as a basic requirement for economic development, modernization of social structure and for providing equality of opportunity for all citizens.

4.3.2 Pakistan's international commitment to double the rate of Literacy by the year 2000 cannot be accomplished without achieving Universal Primary Education (UPE). This will be achieved by complementing the formal primary school system by a strong Non-Formal Basic Education initiative.

4.3.3 A massive Non-Formal Basic Education Programme, on a war footing, will be launched to provide access economically and expeditiously to all the 5.5 million primary school age (5-9 years old) children that are at present out-of-school. The 10-14 year old adolescents and youth who have missed primary education will be given a second chance through a crash condensed course to enable them to complete primary education cycle in 2-3 years time.

4.3.4 The Asian Development Bank sponsored pilot project for 15-25 year old rural women on successful completion will be replicated nationwide.

4.3.5 Attainment of literacy, social and occupational skill training programmes will equip the beneficiaries with appropriate income generation skills to ensure socio-economic development of Pakistan. Educated unemployed adults will also be able to benefit from these skill training programmes.

4.3.6 Additional strategies, such as the tested Quranic Literacy Programme and other methods in collaboration with the other sectors, will be used to achieve universal literacy.

4.4 Physical Targets

4.4.1 The current literacy rate of about 39% will be raised to 55% during the first five years of the Policy and 70% by the year 2010.

4.5 Implementation Strategies:

The major strategies include the following:-

4.5.1 Decentralized planning and mechanisms for harmonizing local specific needs and national priorities through effective negotiatory process, for maintaining national coherence and adequate focus upon national development goals.

4.5.2 Special attention to out-of-school female and male children and youth, including school dropouts, adult illiterates, particularly women neo-literates among all categories.

4.5.3 Emphasis upon the utilization of multiple resources including those of government, NGOs and the community initiatives, taking into account resources from out side the education system, including those of other line authorities and development agencies and ministries.

4.5.4 Creation of demand for education, provision of variety of modes ranging from motivational activities to incentives and disincentives, creation of a sense of collective responsibilities for generating and maintaining demand at national and sub-national levels.

4.5.5 Planning for NFE specifically as a sub-component of a total learning system with interfaces, complimenters and interactions with other sub-components in particular the formal primary education sub-system.

4.5.6 Such planning operation would require corresponding human, material and infrastructure resources specifically allocated for each of the individual actions, at the respective levels.

4.5.7 Another useful resource, available in the country in the form of Boy Scouts and Girl Guides, can be effectively used in the expansion of literacy programmes. It is estimated that there are more than 870,000 Boy Scouts and more than 320,000 Girl Guides in Pakistan. These young people have the physical capacity, intellectual motivation, emotional stability , spiritual commitment, and above all basic knowledge and experience to work with communities collectively in difficult circumstances. They can be entrusted with the responsibility to implement some of the Non-Formal programmes. Based on the performance and quality of service rendered, a system of merit certification shall be introduced.

4.5.8 The existing Non-Formal Basic Education Community Schools/Centers will be increased to 82,000 (including the existing 7000) by the year 2002 to meet policy targets of primary education both through Formal and Non-Formal methods to enroll 5.5 million out-of-school children. The NFBE Community Schools will neither be a parallel nor a permanent system, but will be used to accelerate universal access till formal schooling becomes available to the unreached.

4.5.9 The proposed targets for both the formal and non-formal basic education schools will need to be revised in the light of the Census results made available by the end of the year.

4.5.10 In unreached areas 25000 NFBE Community schools will be gradually upgraded to the middle level, over the policy period.

4.5.11 The implementation would require further resource inputs and infrastructure at Union Council, District, Province and National level. At the national level, the PMLC would co-ordinate with the operational structures at the sub-national level. A major function of the national structure would be to catalyze coordination in both planning and implementation between: National-Provincial, and Inter-provincial levels. Similarly, at the provincial level, each provincial structure would catalyze coordination between Provincial-District, and Inter-Districts, and in a similar mode at the District and Union Council level.

4.5.12 PMLC will involve and encourage all organisations particularly AIOU in the development of teacher training packages, learning materials, teaching aids etc. The AIOU will also be involved to develop post literacy skill training programmes through distance learning.

The teachers of NFBE Community Schools will be encouraged to take up PTC and CT courses of the AIOU to enhance their skills.

4.6 Communication Support System:

Radio and television will play a crucial role and be extensively used for social mobilisation and promoting the cause of basic education, particularly amongst rural females. Media will also be used to impart life skills to the neo-literates.

5. ELEMENTARY EDUCATION

5. ELEMENTARY EDUCATION

5.1 Conceptual Framework

5.1.1 Education is a process through which a nation develops its self-consciousness by sensitizing individuals who compose it. It is not mere public instruction; it is a social institution which provides mental, physical, ideological and moral training to the individuals of the nation.

5.1.2 Elementary Education is the fundamental right of all people, men and women, of all types of areas and places, irrespective of gender, sect, religion or any other denomination. Everyone has the "right to education" states the Universal Declaration of Human Rights (1948). This fundamental right has also been recognized in the Convention on the Rights of the Child (1989) stressing that the child has a right to education, and the State's duty is to ensure that primary education is free and compulsory.

5.1.3 Elementary Education, which is the bed rock and foundation of the entire education pyramid, has the highest rate of return as compared to other sectors and levels of education. Research studies undertaken in both developed and developing countries including Pakistan by renowned researchers of the world indicate that rates of return to investment in education are commonly high, especially at the primary level, and argue that investment in education makes a vital contribution to economic development. Both private and social rates of return at primary level are comparatively higher than secondary and tertiary levels. The average private rate of return is 29% at primary, 19% at secondary, and 24% at the tertiary level. Similarly, the social rate of return is 27% at primary, 16% at secondary, and 13% at the tertiary level. The private rate of return is the highest in the developing countries of Asia. Besides, beginning with the marginal social rates of return, the first years of elementary schooling, generally yield the highest returns, additional years of education yielding progressively lower rates of return.

5.1.4 Comparison and analysis of Socio-economic Development indicators particularly, amongst the countries of South Asian Region, provide convincing evidences to the fact that the elementary education and the literacy have deep, direct, and determining effects on overall development of the country. Not only in social but also in the economic sector, educationally developed countries of this region, have made substantial progress. All the countries of the region such as Malaysia, South Korea, Singapore, Indonesia, Sri Lanka, and Maldives which have achieved remarkable progress in elementary education, have in turn secured and sustained very high per capita GNP and vice versa.

5.1.5 The education and empowerment of girls and women are key factors in contributing to social development, well being, and education of present and future generations. Certainly, it is more expensive and costly to keep a girl illiterate and uneducated than educating her.

5.1.6 It is estimated that out of total 19.22 million primary school age (5-9 years) population only 13.72 million are in school and 5.5 million are left-outs, who are never enrolled. This represents Gross Enrolment (GER) of 71% (Male 85.5% and Female 58%), whereas, at middle

level (VI-VIII) GER is 4.35 million against total 9.5 million population of respective age group i.e. (10-12). Participation rate at middle level is 46% (male 56% and Female 35.8%).

5.1.7 At present, total primary schools in Public Sector are 145,960, including around 37000 mosque schools. One third of primary schools are female schools. In addition to that, 7177 non-formal Primary education schools are run by Prime Ministers Literacy Commission. Total number of ghost schools in all the three provinces is 2284 (Punjab 709; Sindh 1290; and Balochistan 285), whereas, around 30% schools are under utilized. Middle Schools in public sector are 14,590 against 6430 female schools. However, around 10,000 high schools in the country, also provide middle level (VI-VIII) education. Total number of educational institution for middle level education in public sector is 24,590.

5.1.8 Financial constraints and inability of the provinces to meet the ever increasing recurring costs especially teachers' salaries, resulted in a very limited increase in number of teachers. Presently, a total of 339,500 teachers in public sector are teaching at the primary level. Roughly, 33 percent or 117,600 are female teachers. However, the distribution is artificial in the sense that there is an acute shortage of female teachers, which has been adversely affecting the development of girls' primary education.

5.1.9 The shortage of physical facilities and equipment, is critical in primary schools. According to the latest estimates about 25,000 primary schools are without school buildings. Many of the schools are without boundary walls. Most of the one-room schools in the rural areas, are made of a mixture of mud, bamboo and galvanized iron sheets. Majority of the schools do not have latrines and water facilities. There is also a shortage of desks and chairs. Some schools do not even have mats for the school pupils to sit on. However, blackboards and pieces of chalk are available in most of the schools. Teaching kits were developed and distributed to 30 percent of primary schools. However, it was found that the teaching kits are locked in the Headmistress's or Headmaster's room, and are never used. Books are expensive. More often than not, pupils do not have textbooks. A sufficient number of middle schools, is not available to accommodate primary school graduate specially in the rural area. Similarly, the teachers have not properly been distributed amongst the existing middle schools. Curriculum is outdated and irrelevant to the needs of the community. Unqualified teachers are being recruited.

5.1.10 Realizing the fact that elementary education is the cardinal sub-sector and the very foundation of the edifice of education, a lion's share of the education budget (on the coverage more than 50%) is allocated for promotion of Elementary Education. Not withstanding that, in view of need and requirements of UPE it is still insufficient.

5.1.11 The major uses and challenges of the elementary education are summarized as under:

i. At present, more than one third (5.5 million) of primary school age children (5-9) are left outs.

ii. Not more than one-third of the enrolled students complete a full cycle of primary education.

iii. Teacher absenteeism is common in schools especially in the rural areas.

iv. Instructional supervision is weak at elementary level.

v. About one-fourth of primary school teachers are untrained. However, the present training infrastructure does not appear to improve the quality of instruction.

vi. Curricula are overloaded and examination based. Learning materials are inadequate and of poor quality. Teaching methods are harsh and uncongenial for learning and motivating pupils.

vii. Above all, character building which is the basic and fundamental objective of education and training, is inhumanely neglected, creating serious problems both for the individual and the nation.

5.2 Objectives of the Elementary Education

Objectives of the elementary education, have been set in view of national needs and requirements, as well as international commitments such as, World Declaration on Education For All 1990, Delhi Summit Declaration 1993, and subsequent E-9, Ministerial Review Meetings, and UN Convention on the Rights of the Child (1989). These are :

5.2.1 Enactment of compulsory primary education.

5.2.2 90% enrolment at primary level by the year 2002-3 and 105% by 2010.

5.2.3 To enhance participation rate from 46% to 65% at middle level by 2002-3 and 85% by 2010.

5.2.4 Retention/completion of primary education cycle upto 90% students (both boys and girls) by the year 2010.

5.2.5 Achievement of minimum level of learning by 90% primary class students by the year 2010.

5.2.6 Expansion of the base for middle level education.

5.3 Policy Provision

5.3.1 Improving the quality of Education besides an increase in access of Elementary Education.

5.3.2 Emphasis on basic learning achievement at elementary level.

5.3.3 Emphasis on character building at Elementary level.

5.3.4 Improvement of teachers' competencies and enhancement of the relevance of training programmes for teachers.

5.3.5 Introduction of the kachi classes at primary level as part of the effort to improve the achievement of pupils at the Elementary school level.

5.3.6 Maximization of the role of the family, schools, community, non-governmental organizations and the media in the provision of elementary education.

5.3.7 Elimination of disparity and promoting equity.

5.3.8 According higher priority in the provision of elementary education to the out-of-school children.

5.3.9 Diversification of the financial resource base of elementary education.

5.3.10 Adopting non-formal system as supplementary to formal system.

5.3.11 A monitoring system will be developed to obtain timely and reliable information on enrolment, retention, completion, and achievement. In addition, the qualitative monitoring of achievement will also be introduced.

5.3.12 Improving management and supervision through greater decentralization and accountability in service delivery.

5.4 Physical Targets

	Activity	Target Number		
		2002-2003	2010	Total
5.4.1	New Formal Primary Schools	17000	28000	45000
5.4.2	Mosque Schools	3000	17000	20000
5.4.3	Double Shift in existing primary Schools	20000	-	20000
5.4.4	Non-Formal Basic Education school	25000	-	25000

5.4.5	Upgradation of Primary Schools to Middle/Elementary level	15000	30000	45000
5.4.6	Recruitment of additional teachers for Primary school	42700	57000	99700
5.4.7	Recruitment of additional teachers for upgraded schools	12100	13600	25700

5.5 Implementation Strategy

Policy goals and objectives shall be achieved through the following programmes and strategies.

5.5.1 Revise regulations and create stronger and more transparent personnel management mechanisms to promote merit-based hiring.

5.5.2 Assign teachers to schools on the basis of empirical need and reduce transfer rate by recruiting local teachers for local schools.

5.5.3 Revise, strengthen and enforce attendance and leave regulations and strict action to check teachers' absenteeism.

5.5.4 Revamp in-service training for existing teachers, and over a period of five years all primary school teachers shall be provided with in-service training opportunities, and then institutionalize in-service on a 3 years cycle.

5.5.5 Reform and strengthen in-service teacher training; evaluate and replicate existing best practices; cluster delivery mechanisms, such as mobile teacher training experience in Balochistan, the Aga - Khan experience in Northern Areas, and Teacher Resource Centers (CRCs).

5.5.6 Raise the entry qualification for Primary Teacher Certificate from Secondary School Certificate to Higher Secondary School Certificate gradually.

5.5.7 Reform pre-service teacher training, and inlcude the revision of the curricula, revamping textbooks, and instructional materials in the training programmes.

5.5.8 Institute a clear career structure for teachers at the primary and middle levels that includes promotion possibilities, revise and enforce the standards of professional behaviour.

5.5.9 Ensure a better distribution and optimum utilization of teachers.

5.5.10 Revise Annual Confidential Reports (ACRs) to record staff performance and link performance to promotion possibilities.

5.5.11 Institutionalize the incentives and accountability system for teachers to improve their performance.

5.5.12 Relaxation of qualification where no female teacher is available.

5.5.13 Relaxation of age limit for females to facilitate entry into the profession.

5.5.14 Focus on learner-oriented rather than teaching, with the learner, i.e. the child, at the center of the learning process.

5.5.15 Involve active learning, development of critical thinking, and creativity.

5.5.16 Understand the complexity of teaching young children at initial grades and reflect that complexity in a suitable training programme.

5.5.17 Use highly interactive, learner-centered teaching and training materials.

5.5.18 Involve many forms of teaching and learning (e.g. peer group discussion, class observation, distance education, self-study, on -site visits, etc.).

5.5.19 Ensure integration of teaching theory and practice.

5.5.20 Integrate pedagogy with content of knowledge.

5.5.21 Taking training to the teacher (school site) rather than bringing the teacher to the training site.

5.5.22 Focusing not only on teachers but also on heads, supervisors and other critical stakeholders in the system.

5.5.23 Taking into consideration teachers' on-ground conditions such as motivation concerns, knowledge, available time, and resources etc.

5.5.24 Developing partnerships between the public and the private/NGO sector.

5.5.25 Assessing training needs systematically through consultation with teachers and designing the programmes according to their priority needs.

5.5.26 Demonoplization of procurement; quality improvement and lower costs of basic texts.

5.5.27 Reintroduction of 'Takhti' and 'slate', at primary level.

5.5.28 Substantial increase in the non-salary recurrent expenditures on texts, basic school supplies, and learning materials; and improving procurement and distribution mechanisms.

5.5.29 Ensure an adequate supply of basic textbooks and learning materials' availability at the start of the school year, and free of charge for the poor children.

5.5.30 Ensure the availability and use of supplementary reading materials, library books and children literature.

5.5.31 Adoption of uniform curricula for all the public and private schools.

5.5.32 Develop a new and more logical demanding, and challenging curricula taking into account the provincial differences; involve the stakeholders in the process which should precede updating of textbooks and revamping of teacher training.

5.5.33 Introduction and integration in curricula of the new concepts such as computer literacy, environmental education, health education, Aids education, and values education.

5.5.34 The span of Primary education including kachi class shall be six years duration.

5.5.35 Plans to institutionalize Kachi classes in the primary cycle.

5.5.36 45,000 New Formal Primary Schools including 20,000 Mosque School and evening second shift in 20,000 existing primary schools will be opened . 99,700 additional teachers for new primary schools shall be recruited. 45,000 primary schools shall be upgraded to Middle (Elementary) level improving the existing ratio of 1:6 between middle and primary schools to 1:3 by the year 2010.

5.5.37 Construction of new schools and classrooms where objective demographic criteria indicate their urgent need.

5.5.38 Improving the performance of existing schools and building new ones only where need is empirical, transparent and validated by independent monitors. Locate schools as close as possible to clusters of homes where children live rather than where influential people may prefer to have them.

5.5.39 Area/District based targets and Programmes shall be developed for the promotion of elementary education and literacy which may be supervised by District Education Authority.

5.5.40 An incentive tied approach may be adopted for the communities, villages and areas proportionate to their degree of accomplishment and success in elementary education.

5.5.41 Enactment and enforcement of free and compulsory Primary Education Act, in a phased manner, shall be introduced.

5.5.42 Building work shall be given priority to the existing school:(a) build rooms for shelterless schools; (b) replace dilapidated schools;(c) add new classrooms in overcrowded schools; (d)repair inadequate schools; and (e) construct facilities (water supply, boundary walls, toilets of suitable design).

5.5.43 Complete major repairs wherever it is needed, in cooperation with Village Education Committees.

5.5.44 Deploy larger number of LCs and Supervisory Staffs, retrain the existing staff, and certify that the graduates meet the minimum standards.

5.5.45 Train DEOs, ADEOs and LCs in management and VEC organization so as to improve the quality of administration of teaching in the schools.

5.5.46 Strengthen the technical support to teacher and ensure that its performance is appropriately and accurately monitored and sanctioned accordingly.

5.5.47 Prepare a report assessing implementation issues and potential barriers to the administrative consolidation; and develop and implement a 5 year plan to achieve the integration.

5.5.48 Bring about a coherent system of elementary education (Grades 1-8) by putting together government primary and middle schools.

5.5.49 Increase and strengthen planning, management, monitoring and evaluation capacity of Federal Ministry and Provincial Education Departments.

5.5.50 Decentralize selection management functions in elementary education towards the district, the school, and the community, while helping communities and local bodies organize their efforts more effectively.

5.5.51 Work on National assessment capacity by laying down a set of procedures to monitor the aggregate performance at grade four level;

5.5.52 Revise Monitoring the evaluation systems that will enable provincial officials to assess school-level performance and study the associated reasons for their success and failure.

5.5.53 School-level assessment capacity for teachers to measure accurately the student learning.

5.5.54 Participatory processes to solicit from parents and other stakeholders their views for improving teaching.

5.5.55 Reform the current examination system administered at the end of elementary school.

5.5.56 A high level bipartisan political approach to persuade politicians to lend support to primary education in achieving policy objectives and resource mobilization, and to agree not to be involved in micromanagement of primary schools.

5.5.57 Conduct performance review studies on key sectoral institutions and recommend restructuring and development activities as appropriate.

6. SECONDARY EDUCATION

6. SECONDARY EDUCATION

6.1 Conceptual Framework

6.1.1 Secondary Education (ix-xii) is an important sub-sector of the entire education system. On the one hand, it provides middle level work for the economy and on the other it acts as a feeder for the higher levels of education. The quality of higher education, which is expected to produce high quality professionals in different fields of social, economic and political life of the country hinges on the quality of secondary education. This level of education, therefore needs to be organised in such a way that it prepares young men and women for the pursuit of higher education, as well as, prepares them to adjust to their practical lives meaningfully and productively.

6.1.2 The secondary education is a stage, where a student enters adolescence. This is the most crucial stage of life. The basic perceptions and modes of behaviour start taking shape and problems of adjustment with the new roles in life assume critical significance. Four years of secondary education, therefore, provide an excellent opportunity for the educators and educationists to conceive and launch programmes which initiate the learners into proper forms of behaviour and attitudes, which lead to decent productive and peaceful life in future.

6.1.3 Due to strong pressure on the successive governments, secondary education could not attract attention in terms of efforts and investment. The perennial problem of illiteracy and the legacy of backwardness in the field of science and technology has forced the governments to assume greater priority to these two areas. Now, when we have reached a stage, where the number of universities in public and private sector has risen to about 30 and the number of primary schools has crossed the mark of 1,50,000, it is most appropriate to attend to the problems of secondary education seriously. With increased emphasis on quality of primary education and renewed efforts to check staggering drop-out rate at primary level, the secondary level of education now needs to be prepared for comparatively heavier influx of aspirants to this level.

6.1.4 Compared to primary/elementary education the base of secondary education is very narrow. The female section has to bear the major brunt of the narrowness. The problem is quite complex and need not be taken in a simplistic manner. Due to lack of planning in identifying the schools, the areas of highest concentration are overlooked. On the other hand, there are vast tracts of population which are not covered by adequate facilities. Growth of schools in an unplanned manner, therefore, needs to be discouraged. We need to proceed very cautiously and in a planned manner.

6.1.5 The number of science and mathematics teachers' at the secondary level is very crucial and needs to be considered very seriously. There appears to be a strange contradiction here. It could be usual to find a school, where there are no vacant posts, but science and mathematics' teachers are short in supply. It arises out of the present practice of designating the posts in secondary schools. The budget books and all the official documents in all the provinces

name the posts as Trained Graduate Teachers, with different forms and usages. As a consequence, the posts are filled up with regard to their distribution in terms of subject specialization. The political and other pressures also make use of this weakness in rules.

6.1.6 The second fact of this problem relates to the availability of science graduates in teaching profession. Science graduates tend to seek employment in other technical areas, if possible and join teaching as their last resort. The ratio of science students at degree and master levels is also not encouraging. The female section in this area faces most of the disadvantages. Even in townships and cities, the female secondary schools do not have teachers in science and mathematics.

6.1.7 The education policy of 1979 introduced 3-tier system of education. Under this system all the schools were to be upgraded to higher secondary schools having classes XI-XII and middle sections of high schools were to be linked with primary schools. This system has had limited success. On the other hand, it has given rise to a number of problems. In Punjab, where this bifurcation seems to have been completed by appointing DEO's, Directors and DPI's separately, important academic and administrative problems still persist. The middle classes (VI-VIII) in a large majority of schools still continue to be the part of high schools and upgradation of schools to higher secondary schools could not take place at the expected level. The other provinces are also facing similar problems. In Balochistan, for example, only one secondary school was upgraded as higher secondary school, but it had finally to be downgraded.

6.1.8 It is expected that the students should leave secondary education stage and be able to speak and write Urdu or English fluently along with good communicative skills. So, the contents of the curriculum should consist of the components of language, basic science, social sciences and one of the vocational subjects relating to agriculture, industry, business, computer, etc. Vocational component must have vast variety of skill courses/trades to be offered according to the need and convenience of the area where the school is situated. The level of the skills should be such that each student is competent enough for self-employment or employment in public or private sectors. The skills should be linked with the present and future manpower needs of Pakistan's economy so as to promote chances for the employment of the students. It may be emphasized that agriculture is the single largest sector contributing to Pakistan's economy and the single largest employment sector. This discipline calls for its due consideration.

6.1.9 Introduction of technical and vocational component at the secondary level has remained a very controversial issue during the last 50 years. During 60's, technical schools with different nomenclature were established with limited seats in selected areas of the country. During 70's, the concept of agrotechnical education was introduced and technical/vocational subjects were introduced as elective component at class IX-X level. The objective was to produce young boys and girls trained as semi-skilled workers, who would not be looking for white collar jobs. Unfortunately, all these initiatives could not gain popularity. There is no evidence available to prove that the objectives of these programmes were met completely or even partially.

6.1.10 Theoretically, the demand for vocational education still persists. With the passage of time the concept of vocational education has undergone some changes. It is not strictly understood in the sense of a definite vocation or profession. It is not being interpreted as "a skill which prepares a student to respond to the call of practical life", if he chooses to work after secondary level of education. Keeping in view our own experience in the area and that of other countries of the world, we need to readjust our strategy in this area.

6.1.11 The quality of schooling is linked with the qualifications of teacher curriculum, educational materials, teaching methodologies, equipments and physical facilities. It is well understood that the real impact of these factors on the quality of education can be determined through a valid and reliable examination system. The performance measure of the students and teachers is based on their examinations results only. It is, therefore, necessary to reorganize the examination in such a way that they measure the achievement of the whole range of educational objectives. There would be a need to training the teachers in test construction and evaluation.

6.1.12 The secondary schools in 1947 were 2570 (2190 middle and 480 high schools), out of which 217 (153 middle and 64 high) were for girls. Enrollment in classes VI to VIII was 0.221 million, out of which 0.021 million were girls. In classes IX to X it was 0.058 million, out of which 0.007 million were girls. At present, the total number of middle and high schools in public sector are 24403 with gender break-up as 14595 (44% Female) and 9808 (35% female), respectively. The enrolment at middle level is 3.75 million including 1.39 million (i.e., 37% female) whereas, 1.55 million including 0.54 million (35% female) enrolment is at secondary level (grade IX-X). The participation rate at the middle level is 31.6% (male 36.5; female 25.8) and at secondary level is 29.7% (male 36.3; female 22.3).

6.1.13 Being a teacher in Pakistan is neither a prestigious, nor a well-rewarded profession. There are also significant differences in the status of teachers in schools as compared with teachers in colleges, even when they teach the same grades. Most school teachers at the secondary level are at civil service grade 14 to 16 as compared with college faculty, who are at grade 17 to 20. The difference in monthly salary between a grade 16 and a grade 20 employee is nearly twice the maximum salary of a secondary school teacher.

6.1.14 Teachers at intermediate level are subject specialists. Teachers and lecturers in this category are expected to have done their undergraduate work in the subject they teach. The same is not necessarily true of teachers for grade 9 and 10, which means that students studying mathematics, science subjects (Chemistry, Biology and Physics) and English are often taught by the teachers with no special training in these subjects. Furthermore, teachers have a few opportunities to identify professionally with their specialties and to interact with their peers.

6.1.15 Training of high school teachers takes place in teacher training institutions, but formal training is not required in order to sit for the B.Ed examination. Private candidates may also sit for the M.Ed examination. The formal programmes for these degrees are one year each, but actual classroom hours are estimated to cover about six months. Both the B.Ed and M.Ed. programmes are criticized for putting too much emphasis on the theoretical rather than the

practical aspects of pedagogy. Even when teacher training programmes attempt to modernize their curriculum, the teachers who graduate are unlikely to be able to implement changes in the traditional organization and methods in the high schools. Though reforms in teacher training are urgent yet it would not succeed without concomitant reforms in the other aspects of schooling.

6.1.16 Textbooks for schools are inadequate in many respects. The problem appears to have several causes. Firstly, the government control on cost, results in very low production quality. Second, there are no incentives in the system for Textbook Boards to produce good quality books, since they have a complete monopoly.

6.1.17 Introducing competition into the production of school textbooks in Pakistan will be quite complicated, because of the power the Textbook Boards have acquired, both through legislation and custom. At present, the system for distributing books is tied to the system for publishing them. For example, in Punjab, publishing firms that print the books, work together to establish each year a non-overlapping set of temporary warehouses that, among them, cover the province. If the system were suddenly opened up, the distribution system would collapse and the result would likely be a chaos. Therefore, change would have to be introduced slowly, and with full understanding of all the aspects of textbook provision.

6.1.18 Learning programmes designed to meet the needs of growth and development in Pakistan in the future will require good textbooks. The type of learning needed to meet future needs will also depend on the availability of library and reference books, consumable materials, and classroom teaching aids such as maps, models, and audio-visual materials. These are, at present, woefully absent in almost all the schools offering secondary and intermediate education. More and better learning materials will be an essential ingredient in improving the quality of education at these stages.

6.1.19 All the aspects of physical facilities classrooms, laboratories, libraries, furniture and equipment are better provided for at higher stages of education. Colleges are better equipped and provisioned than schools, and the intermediate stage is more advantaged than the secondary stage, but together, these stages occupy facilities that are vastly more suitable than those for the middle and primary stages of most schools. Nevertheless, deficiencies are everywhere, and in some schools the facilities are barely adequate. Desk space is in short supply and often students do not have a proper surface on which to write. Many schools do not have all the required equipment and consumable items missing to conduct laboratory experiments. Library facilities are often inadequate, or sometimes absent. More of the facilities used by secondary and intermediate students have playgrounds, potable water, electricity, gas and boundary walls, than those used by lower stages, but often these basic amenities are absent. On the whole, lack of well-designed and well-equipped classrooms and laboratories hinder the proper delivery of the level of education appropriate to the secondary and intermediary stages.

6.1.20 The state of art in secondary education, reviewed briefly and demand of present time lead to the following broad conceptual framework, which needs to be kept in view, for launching the programme of reforms:

i Development of personality of student at this stage is of significance. He has to develop as an enlightened critical thinker, with proper approach to the social and religious norms of the students.

ii The secondary level of education should provide adequate preparation for entering, the world of work, as well as pursuit of higher education.

iii The access to secondary education should be increased, especially for the female population, strictly in keeping with the requirements and predicting the increasing flow of students from elementary education.

iv The quality of teachers should be improved both in terms of academic and professional accomplishment. This will also imply supply of improved teaching learning material and improved method of training.

v Imbalance between science and humanities teachers, especially in female institutions needs to be corrected, by amending the recruitment rules and providing other incentives, wherever necessary.

vi The ambiguity and contradiction existing in present secondary and higher secondary schools in terms of staff and budget needs to be removed.

viii Keeping in view our own past experiences and that of other co..tries of world, the whole question of integrating technical and vocational education with secondary education needs to be re-examined. The new trends emerging in the world need to be taken seriously.

6.2 Objectives

6.2.1 Under the new policy the secondary education sub-sector would have to be revamped/re-organised in the light of the expected widening of its base in the wake of universalization of primary education in the country. Provision of equal opportunities of education to the increasing number of young people would be a cherished goal of the new policy. Resource constraints, however, would dictate a phased approach for the quantitative, as well as, qualitative improvement in the secondary education. The new education policy envisages as enhancement in the participation rate from 29.7% to 49.87% at the secondary level (IX-X). This would require additional school buildings, teachers, other staff and material/equipment by sizeable increase in financial allocation to meet new requirements and present shortage. In this regard, special attention will have to be given to the removal of imbalances in provision of educational opportunities in case of rural-urban, male-female, privileged under privileged classes of the society. By the same token, the secondary education for female, especially in the rural areas, would have to be strengthened.

6.2.2 Education at the secondary stage should prepare students to be quick learners and easily trainable. They should have good quantitative skills, so that jobs that require manipulation of numbers or other quantitative thinking skills can be learned quickly. They should be good problem-solvers, have experience of dealing with practical problems and situations, know their community and its problems well, have experience of working as a team member, and be accustomed to taking an active role in their own learning. The majority should expect to enter

the job market or qualify for job-related training. A minority should expect to continue to the intermediate stage of education. The curriculum at this level must be appropriate for both outcomes, entry into the labour market and continuing education.

6.2.3 Education at the intermediate stage should prepare students to undertake professional, technical university education. The emphasis should be on acquiring basic analytical skills, including sophisticated use of language, constructing logical arguments, and manipulating quantitative data. Students should know how to undertake library research, and those in science should have familiarity with standard laboratory procedures. All students should have experience in working independently, either preparing term papers or carrying out investigations.

The general objectives of the new policy, therefore, may be outlined as under:

i To prepare the students for the world of work, as well as pursuit of professional and specialised education.

ii To develop the personality of students as enlightened citizens of an Islamic state and peace loving citizens of the world at large.

iii To ensure that all boys and girls, who are desirous of entering secondary education are not deprived of their basic right because of non-availability of the schools.

iv To design a system of recruitment, training and selection of teachers in such a way that well qualified and trained teachers are available for all subject offered at the secondary level.

v To prepare and make available such teaching learning material, which make learning rewarding and attractive.

vi To introduce a system of evaluation, which emphasizes learning of concepts and discourages rote memorization.

vii To remove ambiguities and contradictions in the operation of 3-tier system of education and design rules, regulations and practices which ensure smooth functioning of the system.

viii To adopt a balanced approach towards integration of technical/vocational education and evolve a system, which is cost-effective and practicable.

6.3 Policy Provisions

The above mentioned aims/objectives of the new education policy for secondary education would be achieved through the following policy provisions:

6.3.1 Setting up one model secondary school initially at each District level;

6.3.2 Introduction of a definite vocation or a career at Secondary level;

6.3.3 Revision of curriculum for secondary and higher secondary levels in the light of the objectives of the new policy which will be completed by the year 1998 and 1999, respectively;

6.3.4 Concept of Multiple Textbooks shall be introduced at secondary school level;

6.3.5 Teaching of the Holy Quran with translation will be completed at secondary stage;

6.3.6 The present rigidly compartmentalized scheme of studies at the SSC/HSSC level will be replaced by a flexible system where a student would be free to choose any subject from a comprehensive list of subjects required.

6.3.7 Appointment in the Secondary Examination Boards should be on merit basis; and the efficiency of the Boards will be enhanced by introducing the improved system of terminal examination.

6.3.8 A comprehensive teacher training programme, both in-service and pre-service, in the area of assessment and evaluation for the improvement of public examination;

6.3.9 Provision of project method of teaching will be introduced at the secondary level of education. This device, if successfully implemented, will provide a viable solution to the successful integration of vocational skills into general academics.

6.3.10 Establishment of Education Service Commission for the recruitment of teachers round the year.

6.3.11 Private and foreign Investment will be explored in the field of education and framework of incentives/ encouragement to such entrepreneurs be provided.

6.3.12 Salary structure of the teachers will be based on qualifications;

6.3.13 Education Card will be provided to the needy students.

6.3.14 Action Plan for 2002 to 2010 will be prepared based on the performance report of the proposed policy provisions for its implementation.

6.4 Physical Targets

	Activity	**Bench Mark Target**	
		1997-98	2001-2002
6.4.1	Participation Rate at the Secondary Level	32%	48%
6.4.2.	Participation Rate at the Higher Sec.Level	11%	13%
6.4.3.	Secondary Schools	11000	18000
6.4.4.	Secondary School Teachers	160,000	164,000

6.5 Implementation Strategy

6.5.1 General

i The country has gone through an era of unplanned growth of schools. Due to political and other pressures, there are areas, where the schools are not properly utilized compared to those settlements, where schools are not available, despite demand. In order to overcome this problem, the proposed District Education Authority will be assigned complete authority for location of new schools. The District Education Office will prepare list of their annual demands. The authority will develop contact with the communities and establish feasibility for the school. The communities demanding the schools will have to contribute, land and labour for construction of school. The Government will provide funds on the basis of the contributions made by the local communities. The District Education Authority will be given powers to levy taxes for meeting day to day running of the school.

ii In order to reduce burden on the Government and to utilize non-conventional resources, the work of Education Foundation will be regulated through District Education Authorities. The private sector enterprise will not be required to submit the proposals to the headquarters of the Foundation. The Authority will initially examine the proposals and submit complete case to the Foundation. The proposal separately will go by the advice of the authority. Suitable legislation will be carried out to allow the process to function smoothly.

iii Access to quality of education is the basic right of every citizen. The far flung areas of the country are deprived of opportunities to get better education for their children. In order to make it possible, the policy proposes to provide one model school at each district headquarter. On making initial investigations, some of the provincial governments showed reservation on the feasibility of the proposal. The concept of model school is based on equitable availability of educational opportunity. It cannot, therefore, be dropped altogether. The project will, therefore, be pilot tested, before it is finally launched. Based upon the agreement of the provincial government, 25% of the districts will be carefully selected, in consultation with the District Education Authorities to open these schools. The Authorities will monitor the functioning and utility of these schools. The programme of expansion will be undertaken after measuring success of the pilot schools.

iv It is not possible to provide guidance and counselling service in each secondary school. The government has already established National Education Testing Service (NETS). The first important step in this direction would be to make the people aware of the utility of the service. The NETS will immediately on the enunciation of the policy be assigned the task of preparing aptitude tests. These tests, with detailed instructions, will be made available to the Provincial Departments of Education for administration. The provincial government will administer these tests, wherever required through departments of Psychology in the universities. In case the demand

for the service increases, the NETS will be directed to examine the possibility of opening its provincial offices.

6.5.2 Curriculum and learning Materials

i The Curriculum at secondary stage will be based on two principles. First, it will provide a compulsory core of subjects to give every pupil the knowledge useful for a developing society. Secondly, it will include additional subjects and training to prepare the student for a definite career.

ii Curricula for secondary stage (IX-X) shall be revised by 1999, with a view to stimulate problem solving and independent thinking and in the light of other objectives outlined above.

iii Supplementary teaching/reading and other educational classroom materials shall be prepared exhibiting the relevance of various concepts to life situations/problems.

iv Teaching of the Holy Quran with translation will be completed at secondary stage.

v The Provincial Textbook Boards enjoy complete monopoly over production and distribution of textbooks. The textbooks are written in a very traditional manner. Due to absence of a healthy competition, the Boards have not considered the possibility of introducing innovation in their production. It is time to give new orientation to the whole process. In the first instance the entire style of writing textbooks will be transformed. In order to perform that operation effectively, the Ministry of Education will design models for evaluation of textbooks in selected discipline at secondary level and conduct a model trial. The tried out textbooks will then be handed over to the private publishers and the Provincial Textbook Boards for designing their textbooks accordingly.

vi The concept of competitive textbooks in science and English will be gradually introduced, initially in science and English at the secondary level. In order to control prices and quality, the provincial and Federal governments will continue to exercise their authority for review and approval. The provincial Textbook Boards or other agencies will initially receive the manuscript and undertake initial exercise for approval. They will also negotiate and finalize the extent of quality and pricing. The approved textbooks will then be supplied to the Ministry of Education. The Ministry of Education will select at least three best textbooks in each discipline. These books will become the recommended books for province or the entire country depending upon the nature of books. A detailed mechanism will be worked out, enabling choice. The examination will not be based on a single textbook, as they are today. The paper-setters will be free to choose their questions out of any one of the approved textbooks.

vii There is a general demand for integrating technical education into general education. Our experiments in this area have not yielded any commendable results. The policy, therefore, proposes to take initiative in this area, with great caution. In proposed model schools, a limited number of technologies, most prevalent in the country and the world will be introduced. The expansion of the project will depend upon the public response. The courses for matric technical will be designed in such a way that the students can seek admission to higher education without any hindrance.

6.5.3 Examination

i Assessment items and question banks in school subjects for classes IX-XII will be developed by the end of the year 1999 for monitoring the teaching learning process and achievement of the child. This will ensure uniform quality and standard.

ii Autonomy will be given to the Boards of Secondary Education and R&D Cells will be established in each Board to improve constantly the examination system.

iii Mechanism shall be developed to integrate internal assessment to entirely external, pencil-and-paper one shot test. Extensive in-service training programmes for teachers shall be conducted in assessment techniques. Internal assessment shall be properly moderated. e.g., by the Boards. Moderated marks/grades for internal assessment shall be reported separately either on the certificate or as a part of a composite assessment.

iv Appointments in the Board will be contractual and on merit basis. The extension in tenure will be granted only on efficiency and performance.

v Gradual resort to improved testing instruments for classes IX and X and XI & XII to obviate and minimize unfair means. For this purpose the present structure of examination papers will be reviewed. The share of standardized test items will be gradually increased. The present system of objective questions, which are not objective in any sense, shall be gradually discontinued and replaced by a more scientific method.

6.5.4 Teachers

i B.S.Ed. (Bachelor of Science Education) Programme is operating in two colleges of the country. The Teacher Education Project being implemented with the assistance of Asian Development Bank has designed a similar B.A.Ed. (Bachelor of Arts Education) programme. The detailed strategy has been worked out by the project team and the programme will be implemented throughout the country. This programme will not immediately result in abandoning the present programme of B.Ed. But instead it will be run as a parallel programme.

ii Due to problem in designation of posts in the provincial budgets, availability of science and mathematics' teacher remain a problems. The provincial governments

will be required to undertake survey of secondary and higher secondary schools in areas of their jurisdiction, to determine the number of science and mathematics' teachers on the basis of operational school time-tables. The budget book from the year 2000 will reflect separate posts for science and maths teachers. The recruitment will be made accordingly.

iii There are two streams of teachers being recruited for the higher secondary schools. The direct recruits, who come through the Public Service Commission, have master's degree, constitute one stream. The second stream consists of higher school teachers, who have bachelor's degree and are promoted as subject specialists. The solution of this problem involves provincial intricacies and trade unionism. The provincial governments will be required to constitute committees to resolve this issue in such a way that the present conflicts within the institution are settled.

iv The in-service training of teachers has been a very critical component of education system. Due to continuous changes in curriculum and methods of teaching, it is not possible to abandon this concept. On the other hand, if it is allowed to continue in its present form, its utility will remain doubtful, while it is very expensive. The whole structure of in-service training, therefore, needs to be reviewed. The policy proposed to decentralize the whole system. A new concept of cluster school will be introduced, which will perform the dual function of monitoring and training. The training will be made a continuous process. The centre school around which the school will be clustered; will be provided qualified staff, capable of performing monitoring and training functions. The model schools, wherever established, will become the active centre, for this purpose. The provincial teacher training institutes will only perform the function of training Master Trainers posted in centre schools. The overall supervision and monitoring will continue to be the responsibility of the provincial training institutions.

7. TEACHER EDUCATION

7. TEACHER EDUCATION

7.1 Conceptual Framework

7.1.1 The quality of education is directly related to the quality of instruction in the classrooms. Teacher is considered the most critical factor in the entire education system being a major implementor of all educational reforms at the grass root level. It is a well established fact that the academic qualification, knowledge of subject matter, competency and skill of teaching, and the commitment of teacher produces similar impact on the quality of education of the students at relevant levels. Recognizing the deteriorating quality of education at various levels, efforts need to be intensified to accord adequate priority to the effectiveness of teacher education programmes in the country. With our recent focus on ensuring massive access to "Education for All", the teacher education system has quantitatively expanded to keep a reasonable equilibrium in the demand and supply situation. On the contrary, the qualitative dimension of teacher education programmes has received only marginal attention resulting in mass production of teachers with shallow understanding of both the content and methodology of education.

7.1.2 Many factors are responsible for shaping the quality of teacher education in the country. These factors range from ideological and socio-economic needs to the existing structure of education system as well as ill-defined theories and practices of teaching and learning. The population pressure obviously remains a prime impetus for the rapid expansion of education in the years to come. The teacher education programme, being an integral part of the education system, has also expanded and is sure to expand further to cater to the fast emerging needs of the country. Due care, however, needs to be taken that the essential qualitative imperatives of teacher education are also reckoned while meeting the pressures of demand on the system. The quality concerns of teacher education relate to policy formulation and planning, development and management of teacher education programmes, provision of adequate infrastructure to training institutions, preservice and continuous inservice education of teacher educators, regular enrichment of curriculum content, methods, evaluation techniques, teaching aids and other teacher related resources.

7.1.3 The existing teacher education programme is not being considered adequately responsive to the demands for quality education in the school system. There is a wide range of issues and concerns being expressed about teacher education in Pakistan. In order to improve the existing situation in the field of teacher education, development of any strategy should be given due consideration to these issues and concerns. Some of the major issues and concerns emphasized by the experts are indicated as under:-

i The profession of teaching is usually the last choice for the young men and women. The teachers are, therefore, said to be neither committed nor motivated to teaching. This is more true in case of male teachers than female teachers.

ii The teacher training programmes have an imbalance among the courses pertaining to

academic knowledge of the subject content of school curriculum, teaching methods, teaching practices and curricular activities. This is because of the short duration of most of the existing teacher education programmes.

iii The appointment procedure for the teachers usually disregards merit due to political interference and other malpractices prevailing in the society.

iv The teacher training institutions are facing budgetary and financial constraints and are not adequately equipped to meet the requirements of a dynamic system of quality teacher education.

v There is no effective relationship between the demand and supply of teachers at any level of education in Pakistan. Teacher training is being carried out without a viable policy and planning framework resulting in imbalances between the demand and supply situation.

vi The quality of textbooks in teacher education is said to be the poorest and outdated. The learning materials neither relate to real educational environment nor inspire and motivate the prospective teachers for further studies. There is no mechanism to make teacher guides and supplementary materials available to working teachers.

vii There is no standardized procedure for the appointment of teachers in the teacher training institutions. In the existing system, any person belonging to school or college cadre can be shifted to a teacher education institution.

viii The teacher training institutions face acute shortage of facilities - buildings, equipment, furniture, teaching aids and educational technology, library books and other reading materials. The teacher educators are not being provided with necessary support services. These institutions are also not being supervised in an effective manner.

ix Inservice training programmes for teacher educators are almost non-existent. There is no institutionalized arrangement for providing regular training to teachers and teacher educators. Sporadic training opportunities, if any, lack in quality.

x The examination system of teacher education programmes is highly defective. Being essentially external in nature, it is devoid of encouraging creativity and leadership.

xi Teacher absenteeism, defective management and lack of supervision and accountability practices are some of the major issues which need to be appropriately addressed in the teacher education programmes.

7.1.4 At present the following institutions are offering various programmes as indicated below:-

Programmes and Institutions	Punjab	Sindh	NWFP	Balochistan	Federal	Total
PTC/CT (G.C.E.Ts)	34	24	18	10	04	90
B.Ed/B.S.Ed (Colleges of Education)	08	04	02	01	01	16
M.Ed/M.A (Ed) IERs/Univ. Deptts. of Education	04	02	02	01	--	09
Extension/ Staff Development (Inservice Education) P.I.T.Es	1	1	1	1	--	4
P.I.T.Es	1	1	1	1	--	4

7.1.5 Since independence of Pakistan, there has been a substantial expansion in teacher education institutions. At present, there are 90 elementary colleges and 30 high schools which offer teacher training programmes for PTC (Primary Teaching Certificate) and CT (Certificate in Teaching) to teachers. Institutions which prepare secondary school teachers are known as Colleges of Education. At present, there are 11 Colleges of Education, 4 Institutes of Education and Research and 2 Departments of Education of Universities which offer programmes of secondary school teacher education leading to a Bachelor's degree in Education (B.Ed). The Allama Iqbal Open University is also contributing in the training of teachers by means of distance learning technique. It offers PTC, CT, B.Ed and M.Ed programmes of teacher education. The description of various training programmes is given below:

Training Programme	Qualification for Admission	Duration of Training	Classes to Teach
P.T.C	Matriculation	1 Acad. Year	I - V
C.T	Intermediate	1 Acad. Year	I - VIII
B.S.Ed. (12 + 3)	Intermediate	3 Acad. Years	VI - X
B.Ed. (14 + 1)	B.A/B.Sc	1 Acad. Year	VI - X
M.Ed	B.Ed	1 Acad. Year	VI - XII + Students Teachers of PTC, CT and B.Ed + Supervision
M.A Edu.	B.A/B.Sc	2 Acad. Years	VI - XII + Students Teachers PTC, CT and B.Ed + Supervision

7.1.6 The annual training capacity of all the formal training institutions is about 30,000. In almost all the institutions, there is a pressing demand for admission in teacher training programmes. In most of the cases, there are more applicants than places available. The total enrolment of Allama Iqbal Open University is about 10,000 per annum of which about 7,000 complete various courses every year. The P.T.C, C.T and B.Ed programmes of AIOU are offered in alternative years. The staff of the teacher training institutions belong to education service. There is no special cadre of teacher educators. Any serving teacher or lecturer with a Master degree qualification, with or without professional qualifications, can be appointed as a teacher educator although preference is given to those who hold a Master degree in Education. The preservice teacher training is an essential prerequisite for teaching in primary, middle and secondary schools. However, no preservice training is required for teaching at higher secondary and degree levels.

7.1.7 Keeping in view the existing capacity of our teacher training institutions (which are around 40,000 including AIOU), one may safely conclude that the existing institutions are sufficient to meet the quantitative requirements of teacher training in the country. It is estimated that around 65,000 teachers with P.T.C, C.T and B.Ed, M.A (Ed) qualifications are unemployed because of imposition of continuous ban on new recruitments during the last six years.

7.2 Objectives

i To enhance teacher training capacities.
ii To develop a viable policy and planning framework for teacher training.
iii To institutionalize in service training programme for teacher and teacher educators.

7.3 Policy Provisions/Implementation Strategies

7.3.1 There has been a constant observation that the duration of primary school teaching certificate is far below the norm of other developing countries of the world. Generally, the programmes for Primary School Teaching Certificates range from 12 to 16 years of both general education and teacher training programmes. The norm is, therefore, around 14 years of education in most of the countries of the world. In order to strengthen the primary level teacher training programmes, it is proposed to start a Diploma in education programme for matriculates with three years duration. Through this diploma, the teacher will study upto the Higher Secondary School Level as well as obtain pedagogical skills for teaching at the Primary level. This Diploma will provide the respective teachers to receive integrated training both in the school subjects as well as pedagogical skills and enable them to pursue either general studies upto B.A, B.Sc and M.Sc levels or continue to serve the teaching profession.

7.3.2 Presently, a few institutions in the country offer an integrated programme at B.Sc + B.Ed level known as B.S.Ed programme. These programmes have proved to be very successful as they attract students at F.Sc level and induct them in the teaching profession by providing them a 3 years integrated training with the benefit of two degrees. This programme enables the student to receive the qualifications of both the B.Sc and B.Ed levels and enables them to pursue their higher studies at M.Sc and M.Ed levels. This open ended facility to pursue either of the two programmes has attracted a vast number of talented students to the teaching profession. It is proposed to expand this facility horizontally to those students who want to pursue general education as well as obtain a B.Ed degree through an integrated B.A + B.Ed programme at the Colleges of Education. The students of these programmes will have the opportunity to continue their studies at M.A, M.Sc or M.Ed levels. These teachers will be equipped with academic background of school subjects as well as trained in pedagogical skills to teach students from grades 6 to 10. All Colleges of Education will offer this combined degree programme to meet the emerging needs of quality teacher education at the secondary level.

7.3.3 Unfortunately, at present there are no arrangements for training of educational administrators, supervisors, researchers and curriculum planners in the country. The M.Ed degree at the university level needs to be strengthened so as to produce a corps of trained educational administrators and supervisors who can become headmasters/headmistresses of middle and high schools as well as DEOs, SDEOs and ADEOs to provide leadership in the field of education. Besides, the University Departments of Education and IERs, leading Colleges of Education in the country will also be strengthened to offer this degree so as to cater to the expanding needs of the country.

7.3.4 It is estimated that presently about 200,000 headmasters/headmistresses and supervisory personnel are working in the country from primary upto higher secondary levels. There is no institutionalized arrangement for providing inservice training to these educational administrators and supervisors. Invariably, they belong to the teaching cadre and possess a teaching certificate or a degree which does not provide them suitable training for managing the schools and supervising them in an effective manner. Since the basic thrust of this policy is on good governance which can be ensured through effective management and supervision, it is planned to launch a three months' intensive training programme for all the educational administrators and supervisors in the country both through the newly established Provincial Institutes of Teacher Education (P.I.T.Es) as well as the existing Education Extension Centers in the provinces. Senior level administrators and planners will, however, continue to be trained through the Academy of Educational Planning and Management at the national level. Henceforth, newly appointed headmasters and members of supervisory staff will be confirmed on their positions only after obtaining the proposed certificate of educational management and supervision from these institutions.

7.3.5 At present, about 4,000 teacher educators are working in the existing 125 teacher education institutions both in the provinces and at the federal level. Whereas, we continue to stress effective training of teachers at the PTC, CT, B.Ed and M.Ed levels, there is no mechanism to continuously upgrade and strengthen the abilities and skills of teacher educators who are responsible to provide training to a vast number of teachers every year. Hence, this policy provides for the establishment of a National Institute of Teacher Education (N.I.T.E) at the federal level which will continuously provide opportunity to the teacher educators to improve their academic background as well as keep themselves abreast with the innovative pedagogical developments at the international level. The National Institute of Teacher Education would have different centres i.e Centre of English Language, Urdu Language, Arabic Social Studies, Maths, Agro-Tech, Physics, Chemistry, Biology, Computer Science, Geography etc. The centre would give subject related content and pedagogical training with a focus on research carried out uptodate in the relevant area and motivate the concerned teacher to continue research in his/her subject. Regular inservice courses will be launched through NITE both in the academic and pedagogical subjects. About 300 teacher educators will be enabled to improve their professional qualifications through this Institute every year.

7.3.6 The curriculum of PTC, CT, B.Ed and M.Ed levels will be improved so as to make make these programmes learner centered and provide opportunities to the prospective teachers to receive necessary training in pedagogical skills involving creativity, problems solving, project method and use of other innovative approaches. Through interactive studies, the respective teachers will receive training in leadership role and develop self study attitude. The academic calendar of these institutions will be extended by curtailing spring, winter and summer vacations. The programmes will be based on semester system and teacher education institutions will be provided the authority to award certificates, diplomas and degrees through a mutually agreed arrangement with the respective Boards and Universities.

7.3.7 At present, the teacher education system provides the worst example of anomalies and paradoxes. There are no identified frontiers of this profession and any teacher belonging to the

college and school cadre can become a teacher educator and join or leave the teacher education institution either at his own initiative or at the directive of the higher authorities. Many teacher educators who have received higher training in teacher education skills through various projects and programmes have already left the teacher education institutions and joined as administrators in general education institutions. Similarly, many headmasters/headmistresses, as well as, DEOs and SDEOs, who are not able to successfully cope with their administrative responsibilities, are transferred to these institutions making the teacher education institution as a dumping place for unsuccessful administrators. This situation can be corrected by making teacher education as a separate cadre in itself where the teacher educators must be in a position to adopt teacher education as a profession and serve the system on longitudinal basis. All professional educators belonging to the teacher education system must have their identified cadre and sufficient chances of promotion and upward mobility within this cadre upto the level of the Principal of the College/Institute. Beyond this level, the Principals may be appointed as Directors of School and College Education.

7.3.8 Recently, a vast number of teachers are being recruited to man the Non-Formal Primary Education Institutions in the country. Unfortunately, these teachers do not have sufficient background in teaching skills, particularly with reference to teaching in the Non-Formal Education Institutions. It is, therefore, planned to start a three months' intensive Orientation Programme for providing basic skills of teaching through Non-Formal Education methods under the umbrella of Allama Iqbal Open University which has sufficient manpower and infrastructure to provide necessary training to a vast number of N.F.E teachers every year.

7.3.9 Teaching as a profession still occupies a very low priority in the order of preferences of our school and college graduates. The best students prefer to join medicine, engineering, business, commerce, international affairs, computer science, and other professions. Hence, the teaching profession does not attract suitable number of talented students to join the fast expanding educational institutions of the country. Unfortunately, mediocrity has become the norm of most of our educational institutions. In order to attract talented students to the teaching profession, a stipend scheme will be started to attract these students during their studies at the intermediate and degree levels. These students will be contracted to join the teaching profession on the completion of their studies at intermediate and B.A, B.Sc levels. Those receiving higher qualifications during their service will be given adequate incentives of advance increments, as well as, rapid promotion within their cadres so as to retain them in the profession.

7.3.10 Teacher Foundations shall be established in all the provinces. These will provide financial assistance to the spouse of the deceased teachers and scholarships to their talented children for pursuing higher education. In addition, children of teachers shall be exempted from payment of tuition fee in the public sector educational institutions.

7.3.11 The best teachers of each district will be sent on Haj on government expense for which criteria will be developed by the provincial governments.

7.3.12 There is sufficient evidence to substantiate the fact that female teachers are far more effective than male teachers at the primary level. In order to encourage more female teachers

to join the primary institutions, three-pronged measures will be adopted, viz: (a) all newly established primary schools will be exclusively staffed by female teachers. These schools will provide education to both boys and girls; (b) staggered preservice training courses during summer vacation will be launched at PTC, CT levels through which untrained female teachers will be provided preservice training during summer vacation; and (c) there will be no upper age restriction for female teachers to join the teaching profession.

7.3.13 In the recent past, it has been observed that there has been an oversupply of teachers belonging to the urban areas. There are still pockets of disadvantaged institutions in the far flung rural areas where trained teachers, particularly female trained teachers, are not attracted to serve and continue teaching on long term basis. In order to universalize Primary Education in the country, and to extend education facilities upto the Elementary level, it is highly necessary to provide suitable number of trained teachers to these disadvantaged institutions. This may be done through various efforts by (a) providing stipend to female students at school and college levels and contracting them to serve specific institutions for a period of 3-5 years, (b) providing incentives in terms of special pay and allowances for working in far flung rural institutions, (c) extending residential facilities and daily commuter services to these institutions. Besides these measures, retired personnel may also be engaged to teach in these institutions until regular staff is attracted to serve these institutions through various schemes of incentives, (d) opening daycare centres near the schools for lady teacher's siblings.

8. TECHNICAL AND VOCATIONAL EDUCATION

8. TECHNICAL AND VOCATIONAL EDUCATION

8.1. Conceptual Frame Work

8.1.1 Sustained socio-economic development is not possible by mere capital investment unless it is reinforced with proper supply of adequately trained scientific & technical manpower. Rapid economic growth demands a mixture of skilled workers/tradesmen; technicians, technologists; engineers, research and development scientists trained in areas linked with national development requirements and needs of the Industry. There is, however, no empirical formula to tell precisely the composition of the work force in any given environment. The needs of the society; level of skills & technology applied in their system; socio-economic conditions, level and scope of industrialization; availability and extent of use/exploration of natural resources; and many other such factors that influence this composition. A well-planned Education system including Technical and Vocational Education (TVE) is, therefore, essential for economic development of the country.

8.1.2 Unfortunately, there has been greater increase in facilities for general education in the country over the years. The number of graduates without technical qualifications looking for employment in the white collar sector, has gone beyond the absorption capacity. As a result there is rampant unemployment among the educated youth. The prevailing law and order situation can at least partly be attributed to this ever-swelling mass of unemployed frustrated educated youth. There is also, heavy dropout at various stages on the line which need to be catered for. Furthermore, there is undue pressure on higher education institutions simply for the reason that school-leavers are unable to get wage/self-employment for want of any employable skill. It requires a multi-pronged strategy to address this situation. While concerted efforts are being made to raise academic standards of education and arrest dropout, there is a dire need to relate education to the world of work and develop, among the students, awareness and interest for acquisition of skill in employable trades.

8.1.3 Furthermore, the examination results at secondary and higher secondary levels indicate that over 50% of the students fail at these stages. Both, who drop out at these crucial stages and those who pass subsequently with poor grades, fail to find jobs for want of any employable skills and academic competence. The mass of unemployed and frustrated people, besides being a national wastage, give rise to law and order and other social problems. So, there is a need for shift towards more purposeful technical and vocational education to make our human resources more productive.

8.1.4 Keeping in view the cost-intensive nature of vocational education and the financial limitations, at least a modest beginning in this direction is inevitable. Opponents of vocationalization of school education quote the example of Agrotechnical Education scheme launched in seventies. The inability of this scheme to achieve desired objectives cannot be construed as failure of the concept. The Agrotech Scheme could not achieve the envisaged objectives/success for two reasons. Firstly, it was extended to schools more than planned and thus the requisite inputs could not be provided. Secondly the non-examinable (By Boards) status of Vocational subjects resulted in casual attitudes of the students, teachers as well as school

administration towards these subjects.

8.1.5 One of the reasons for not making much headway on various fronts in the education sector is that instead of analyzing the causes of inadequate performance and rectifying the deficiencies to achieve the envisaged objectives, the schemes are abandoned prematurely labelling them as failures. Examples of many such innovative literacy programmes are before us which reveal that we are still among the most illiterate nations because of inconsistent approach. So, we need to reassure ourselves and make a fresh effort to reactivate the process of vocationalization of secondary education (classes IX-X) with an improved strategy taking into consideration the past experiences.

8.1.6 The terms Technical and Vocational Education are sometimes used synonymously. However, in practice in Pakistani context, the term Technical Education refers to post secondary courses of study and practical training aimed at preparation of technicians to work as middle level supervisory staff; whereas the vocational education refers to the lower level education and training for the preparation of semi-skilled & skilled workers in various trades. At present, a number of departments/agencies such as Education, Labour and Manpower, Industries, Social Welfare and Agriculture Departments are involved in TVE. The Federal Ministry of Education is basically responsible for Policy Planning, coordination of standards and curriculum development for post-secondary technical education provided in Colleges of Technology & Polytechnic Institutes under the Education Departments. Besides, a number of vocational institutes, particularly for females, are also being run by the Provincial Education Departments. In addition to the training of engineering technicians, the Education Departments also administer Commercial Education Institutions to train manpower for business sector and offices.

8.1.7 Presently, the middle and basic-level-trained manpower comes from the following streams:-

i Polytechnic Institutes & Colleges of Technology operating under Ministry of Education and Education Departments.

ii Commercial Training Institutes under the Ministry of Education and Education Departments.

iii Vocational Institutes under the Education Departments.

iv Training centres operating under aegis of various departments e.g. Labour & Manpower, Social Welfare, Industries, Agriculture etc.

v Apprenticeship Training Programme administered by the Ministry of Labour & Manpower and Provincial Labour and Manpower Departments.

vi Informal system of training - Ustad-Shagird system.

8.1.8 Starting from a very narrow base at the time of independence, there has been

manifold increase in the number of TVE institutions. Yet, the TVE is confronted with a plethora of problems and a lot remains to be done to improve quality and access. Major issues and problems include:-

i Inadequate Spatial Coverage- Presently, there are 21 Divisions without a Polytechnic for Women, 65 districts without any Polytechnic for boys, 329 Tehsils without a Vocational Institute for boys and 277 tehsils without a vocational institute for girls.

ii Inadequate financial resources and over-dependence on government funding.

iii Lack of Coordination between various Departments involved in TVE.

iv Lack of Industry - Institution Liaison resulting in low external efficiency.

v Lack of relevance of Curriculum to Job Market Requirements.

vi Acute shortage of Textual Material Private publishers are not attracted because of low clientele and economic viability. The imported books, besides being very expensive and posing language problem, do not cover the entire course content, and in most cases more than one book is needed.

vii Inadequate and poorly trained faculties, poorly equipped and maintained workshops, and inadequate administrative infrastructure resulting in low internal efficiency.

viii Poor institutional capacity for planning and development of TVE and lack of relevant data. The planning, management and organization of TVE is supply- oriented and has not kept pace with the needs of the labour market. The system of coordination between the Ministry of Education and other Ministries/agencies of the Government and the Public and Private Sectors also needs to be improved to raise the efficiency in the use of resources and Linkages between the provider and user of TVE. But the Ministry of Education at the Federal level and the Directorates and Boards of Technical Education in the Provinces lack personnel to undertake professional activities which they should perform.

8.1.9 The main strategy underscoring the new policy initiative is basically qualitative improvement with emphasis on strengthening and consolidation of the existing technical and vocational education facilities. The policy aims to improve the quality of Technical Education in order to enhance employability of TVE graduates by moving from a static, supply - driven system to a demand-driven system, capable of reacting efficiently to labour market needs and opportunities. Besides, of course, a modest quantitative expansion along with the introduction of new technologies to meet the growing demand for technical manpower at the middle level, has also been provided.

8.2. Objectives

8.2.1 To develop opportunities for technical and vocational education in the country for producing trained manpower, commensurate with the needs of industry and economic development goals.

8.2.2 To improve quality of Technical Education to enhance employability of TVE graduates by moving from a static, supply-based system to a demand-driven system.

8.2.3 To design the programme of technical and vocational education in such a way that dual purpose of self-employment and availability of trained manpower for industry is served simultaneously.

8.2.4 To develop in the students technical skills, desirable work habits, and non-technical abilities.

8.2.5 To establish an evaluation system which emphasizes relevant skill and project orientation.

8.2.6 To promote institution - industry Linkages to enhance relevance of training to the requirements of the job market.

8.2.7 To impart employable skills to reduce unemployment among educated youth.

8.3 Policy Provisions

8.3.1 A National Council for Technical Education shall be established to regulate Technical Education and to coordinate efforts of various departments/organizations in this field.

8.3.2 Private sector participation in the promotion of Technical and Vocational Education shall be encouraged.

8.3.3 Revision and updating of curricula shall be made a continuing activity to keep pace with changing needs of the job market and for accommodating the new developments.

8.3.4 Components for development of non-technical competencies e.g. work ethics, communication skills, safety and health measures, entrepreneurial skills etc. shall be introduced in the curricula.

8.3.5 Institution - Industry linkage shall be strengthened to enhance the relevance of training to the requirements of the job market.

8.3.6 Funding various institutions for purchase of raw materials for practicals and repair and maintenance of equipment and machinery shall be based on enrolment.

8.3.7 An element of self-reliance shall be introduced to reduce burden on public exchequer.

8.3.8 Evaluation and accreditation system shall be improved.

8.3.9 Examination shall be made job and project-oriented through objective techniques to measure the competencies of students.

8.3.10 In-service training shall be provided to improve quality of existing teachers and a pre-service Teacher Training programme of B.Ed. (Technology) shall be introduced to provide trained instructors for Polytechnics and vocational institutes.

8.3.11 New institutions shall be established to improve spatial coverage and access to TVE. Evening shifts shall be started in the existing institutions where demand exists.

8.3.12 Access to TVE shall be further increased through distance education and other non-formal modes.

8.3.13 New/emerging technologies e.g. Telecommunication, Computer, Electronics, Automation, Petroleum, Garments, Food Preservation, Printing and Graphics, Textile, Mining and Sugar Technology etc. greatly in demand in the job market, shall be introduced in the selected existing Polytechnics.

8.3.14 Computer education will be made compulsory component of the curriculum of Technical Education and Computer Laboratories with related facilities shall be established in all the Polytechnics and Colleges of Technology.

8.3.15 Institutional Capacity for planning and development for Technical - Vocational Education shall be enhanced.

8.3.16 Continuing education programmes based on modular approach shall be introduced in different institutions.

8.3.17 To overcome acute shortage of Textual material, the prospective authors, selected from amongst senior teachers of TVE, will be motivated through financial incentives to develop Teaching Learning Resource material.

8.3.18 Liberal in-service training facilities shall be provided to the TVE teachers to enhance the quality of instruction.

8.3.19 Opportunity for further education shall be provided to the graduates of Polytechnics/Colleges of Technology.

8.3.20 The programmes of instruction in Commercial Training Institutes shall be modernized and a diploma programme in "Office Management and Commercial Practices" shall be introduced in selected Commercial Training Institutes.

8.3.21 The base for Technical and Vocational education shall be broadened through

introduction of a stream of Matric (Technical) and establishment of Vocational high schools.

8.3.22 In order to provide conducive teaching - learning environment, laboratories and workshops shall be refurbished and modernized.

8.3.23 Action Plan for 2002 to 2010 will be prepared, based on the performance report of the proposed policy provisions for its implementation.

8.4. Physical Targets

Pakistan inherited a very narrow Technical Vocational Education base. Technical Education as an independent stream started in midfifties with the establishment of two Polytechnic Institutes at Karachi and Rawalpindi. Over the last 40 years there has been manifold increase in the number of institutions. Presently (1996-97), there are 84 Mono/Polytechnic Institutes and Colleges of Technology (including private sector institutions) offering a 3-year Diploma of Associate Engineer in over 20 technologies. The total enrolment in Diploma courses is little over 42,000. Vocational education and training in various trades (one year certificate and two year Diploma) is offered in Vocational Institutes. There are 194 Vocational Institutes with an enrolment of about 9500, operating under the Provincial Education Departments. Commerce education, to train manpower for business sector and offices, is provided in Commercial Training Institutes which offer 1 year certificate in Commerce (C.Com.) and 2 year Diploma in Commerce (D.Com.) programmes. The number of Commercial Training Institutes at present stands at 216 with total enrolment of about 22600. It is planned to increase the number of Mono/Polytechnic Institutes to 135, that of Vocational Institutes to 294 and Commercial Institutes to 266 over the next 5 years i.e. by 2002. The enrolment in these institutions is expected to increase to 62,000, 15,000 and 28,000 respectively.

8.5 Implementation Strategy

8.5.1. National Council for Technical Education shall be established as a statutory body through an Act of the Parliament. The Council would be a self-financing body except for initial seed money. The Council in collaboration with other concerned agencies, shall take measures to set standards of Technician Education; evaluation and up-dating of curricula; coordinate efforts of various Departments/Agencies involved in TVE; carry out need-assessment surveys; and advise the Government on the future expansion and development of Technical Education. The Council would also take care of the professional matters of Technicians and Technologists, including their registration.

8.5.2 The National and Provincial Education Foundations shall provide matching grants and/or soft-term loans to the private investors for establishment of TVE institution for which the said Foundation shall be adequately funded by the respective Governments. The private investment shall be further encouraged through other incentives such as provision of land on subsidized rates, concessional import tariff on training equipment and machinery, tax holidays etc. for which necessary administrative and legislative measures shall be taken.
Private industries shall be encouraged, through similar incentives, to establish Training centres

in the industrial units. Foreign investment in Technical-Vocational Education wi
through provisions of incentives e.g. repatriation of profit and concessional im
plant, machinery and equipment with no sales tax as per provisions of the Investment
1997.

8.5.3 National Technical Teachers' Training College(NTTTC) has been declared the competent authority under Federal Supervision of Curricula, Textbooks and Maintenance of Standards of Education Act 1976. The NTTTC in collaboration with the Boards of Technical Education, Provincial Research and Development Cells, proposed Council for Technical Education and experts from Commerce and Industry shall carry out revision/ updating of curriculum on continuing basis to keep pace with the changing job market requirements and scientific and technological advancement in the field. The curriculum and Instructional Material will be designed with the following broad considerations:-

a. Pre-Vocational:

   i. Exposing students to the world of work and to foster positive attitudes towards it.

   ii. Use of common tools and machines with the required level of skill.

   iii. Programmes/ projects for inculcation of dignity of labour among students.

b. Vocational Education:

   i Programmes to foster manipulative diagnostic skills of fault finding, maintenance and repair of equipment, machines, tools & instruments and installation of machines and supervision.

   ii. Machine operations with greater accuracy applying necessary safety precautions for producing components and parts according to given specifications.

   iii. Entrepreneurial skill development programmes to encourage self-employment.

c. Technical Education:

   i. Development of technical communication skills for communicating the design information to skilled workers and abilities to plan and control the practical work.

   ii. Development of practical skills of servicing, assembly fault finding, testing, inspecting, measurements and practical designing.

   iii. Entrepreneurial skills development programmes to encourage self-employment.

Computer education will be made compulsory component of the curriculum of Technical Education. A component for the development of non-technical competencies e.g. work ethics, communication skills, entrepreneurial skills etc. shall be introduced in the curriculum.

The NTTTC shall be further strengthened to play this role effectively.

8.5.4 In order to reduce dependence on government funding the following measures shall be taken:-

i Industrialists and philanthropists shall be encouraged to create endowments in the name of various TVE institutions through liberal tax exemptions on such donations.

ii Polytechnics and Colleges of Technology shall run customized training courses for industrial workers on charge to the concerned industry to generate revenues to supplement the Government grants.

iii Production Units shall be established in selected institutions with dual purpose of providing training to the students and generating income for the institutions. Necessary amendments in the financial and administrative procedures shall be made for effective functioning of these units.

iv The TVE institutions shall also run short-duration courses in demand in job market on self-financing basis.

v The Institutions shall also provide services to the community with dual purpose of fostering institution community relationship and to generate revenues for the institutions as well as for the needy students.

8.5.5. Boards of Technical Education shall be strengthened to undertake research and development for improvement of evaluation techniques and accreditation system. The Boards in collaboration with the Council for Technical Education shall set national standards to enhance quality and facilitate determination of equivalence between courses offered by various agencies. Experts from Commerce and Industry shall also be involved in the evaluation process to build up confidence of the end-users.

8.5.6 To strengthen Institution - Industry linkage the following measures shall be adopted:-

i Management Committees with representation from local/relevant Industries and Chambers of Commerce & Industries shall be established in every institution.

ii Participation and involvement of experts from Commerce and Industry in the process of Curriculum development shall be ensured.

iii Instructors shall be encouraged to have internship in the industry in the areas of their specialization as part of training by allowing them liberal leave on full pay or deputation for which necessary amendments in service rules shall be

made.

iv Experts from local/relevant commerce and industry shall be invited as visiting lecturers in Polytechnics and Colleges of Technology.

v The Polytechnics & Colleges of Technology shall be encouraged to undertake research and development projects and consultancy work for the industry.

vi Polytechnics and Colleges of Technology shall arrange customized courses for training of industrial workers.

vii Steps will be taken to provide for practical training of students in the industry.

8.5.7 In order to increase access to TVE through distance education and other non-formal modes, Allama Iqbal Open University shall play a major role. The University has well-developed facilities and trained faculty and is running a number of such programmes. These will be expanded further. The University will develop curricula and training materials for teachers and students. The University shall launch the programmes through its system and also evaluate the output of this intervention.

8.5.8 In order to build up institutional capacity for realistic planning and development, the NTTTC and the Provincial Research and Development Cells shall be strengthened to establish Management Information System (MIS) for maintaining data base of existing TVE facilities and job market. They shall also conduct labour market surveys and tracer studies, develop career development programmes for technical teachers and disseminate information on technical manpower status, to guide future expansion and development of TVE. The provincial R&D Cells shall be linked with each other and with NTTTC at the Federal level for effective working. Capacity for policy planning, implementation, and monitoring and evaluation for TVE within the Ministry of Education shall also be increased.

8.5.9 One of the major problems in TVE is low quality of teachers. Most of the TVE teachers do not get opportunities to update their knowledge. In-service training on regular basis is required. NTTTC shall organize in-service training for the TVE teachers with continual assessment for updating their knowledge. Besides, a 3 year pre-service Technical Teacher Training Programme of B.Ed. (Technology) shall be introduced at the National Technical Teachers' Training College. Necessary spade work such as development of curricula, and provision of physical inputs to launch the programme from 1998/99 is underway. The entry requirement for the proposed programme will be Diploma of Associate Engineer or F.Sc. Pre-engineering. The programme will be based on modular approach with multiple entry points.

8.5.10 The graduates of Colleges of Technology/Polytechnics shall be provided further opportunity for upward mobility. M.Tech. will be introduced so that B.Tech. graduates can further improve their qualifications.

8.5.11 The present graduates with Diploma in Commerce and Certificate in Commerce, being churned out from the Commercial Training Institutes, are not equipped with the need of the present day office and business sector. At best these graduates are becoming office clerks with very little knowledge of modern office practices. The new Diploma programme in "Office Management and Commercial Practices", shall be introduced to overcome the existing

deficiencies. Students shall be trained in computer usage, operation of modern office equipment like fax machine, photostat machine, mini telephone exchange etc. They shall, also, be taught modern office management practices.

8.5.12 To expose students to the world of work and foster interest and develop an elementary level of skill in employable trades, a stream of Matric (Tech.) parallel to Science and Humanities Groups shall be introduced in 10% (3% female 7% male) secondary schools (classes IX-X) in a phased manner over a period of five years i.e. by the year 2002. One or two vocational subjects shall be introduced in each of these schools as per need of the area. Workshop buildings and some equipments are available in some schools as remnants of old schemes. Similarly, vocational teachers are also available in some schools. These facilities with some additional inputs shall be used to introduce the Matric (Tech.) scheme. The existing vocational teachers shall be retrained in NTTTC and Technical Teachers' Training Centres in the Provinces. In addition, the pass-outs of B.Ed. (Technology) programme will also be available to work as Technical Teachers.

8.5.13 The scheme of studies shall be reviewed to accommodate the technical subjects without diluting the contents of the relevant science subjects, so that the students are not handicapped for further studies. In order to develop desired level of skill a part of summer vacation and period between secondary school examinations and declaration of results shall be utilized for extensive practical training in addition to regular practicals during the year. The vocational courses shall be examinable by the Boards like other subjects.

8.5.14 A new stream of Vocational High Schools shall also be introduced and one such school for boys in every District and for females at Divisional level shall be established in line with needs of the area. These schools would offer 2-3 vocational subjects relevant to the needs of the area.

9. HIGHER EDUCATION

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9.1 Conceptual Framework

9.1.1 Higher education is today recognized as a capital investment and is of paramount importance for economic and social development of the country. Institutions of higher education have the main responsibility for equipping individuals with advanced knowledge and skills required for positions of responsibility in government, business, and other professions. Only highly educated manpower can handle advanced technology. Thus, without the participation of highly qualified manpower, the process of economic development is very difficult to be accelerated. It is, therefore, important that decision-makers must recognize that higher education is an important factor of development.

9.1.2 The rapid means of communication and digital revolution have opened wide vistas of the world, especially for higher education institutions. The rise of internationalization, globalization of economies, knowledge and culture; and the concept of lifelong learning give a distinctive character to higher education both in international and national contexts. Through its contribution to lifelong learning, competitiveness and the pursuit of excellence, higher education has to play a significant role in a society. Internationalization has put university education in the forefront of the world educational map. Our universities and institutions of higher education will have to meet international standards and produce graduates who can compete in the world-wide. Accordingly, higher education institutions must be responsive to the challenges of a rapidly changing and challenging new world; expectations of society and growing demands of the rising student population. This policy, therefore, looks forward to a new beginning to higher education in Pakistan.

9.1.3 The policy views higher education as a source of great potential for the socio-economic and cultural development of the country and believes that through quality higher education the nation can be transformed into a developed nation within the life time of a single generation. Factors such as the distinctive nature of higher education institutions; international mobility of students and teachers; accessibility of computer-based learning; pursuit of research and scholarship, globalization of economy and emerging challenges of the 21st century have a direct impact on the future development of higher education.

9.1.4 This policy stipulates the establishment of a system that will be able to:

a. preserve the Islamic values and the cultural identity of the nation;

b. expand the access to quality higher education on merit and equitable basis irrespective of gender, region, class, religion or caste;

c. produce highly qualified manpower for meeting the needs of the country for the 21st century. This manpower must be moral and humane;

d. contribute to the advancement of knowledge and prosperity of the nation.

9.1.5 The underlying guiding principles for the policy would be the provision of resources and opportunities on the basis of equity, private-public partnership accompanied with development of quality, effectiveness, efficiency, academic freedom, institutional autonomy, public accountability, good governance, and management.

9.1.6 Participation is related to availability of places, opportunities, qualified staff, admission policies, the cost and perceived benefits associated with entry to higher education. Most of the advanced countries have achieved a participation rate of 50% of the age-group 17-23. The student enrollment in Pakistan has an exponential increase from 644 in 1947-48 to 101346 students in 1996. In spite of that less than 3% of the age-group (17-23) have access to higher education. More intensive enrollment is seen in professional education which has almost tripled. The growth in enrollment, however, has been much faster than the numerical increase in institutions. As a result, there is a limited access to higher education and many of the prospective students who are unable to get admission are forced to join unrecognized institutions or give up their pursuit of higher education.

9.1.7 If we are to realize the national objectives, then we will have to increase our enrollment percentage in the higher level of education. For that purpose, Pakistan will have to create more places in the higher education system for the rising student population. It is envisaged that a number of factors, such as, rising demographic trends, high rates of returns associated with higher academic degrees, cheapness of higher education in public universities, absence of entry tests, attraction of government jobs for security and prestige and the expanding size of the middle class will continue to put pressures for more places in higher education institutions.

9.1.8 Given the present intake of tertiary level institutions, the demand of student places would be exponentially high. In order to develop the country to a respectable level, it is envisaged that the participation rate would need to be enhanced to at least 10% of the age-group. This means that a population of 2.5 million would need to be provided higher education by 2010. If we are to realize the objectives of 'Vision 2010', then we will have to increase our enrollment percentage in the higher level of education. The likely demographic scenario by 2010 would be as given below:

Table Demographic projection model

Year	Total (in millions for the age group 17-23 years)	Males	Females	Total population (in millions)	
1995	15.611	8.113	7.498	130	12.1%
1997	17.170	8.875	8.295	137	12.5%
2000	19.194	9.822	9.372	149	13.0%
2005	22.191	11.226	10.965	168	13.3%
2010	25.376	12.919	12.457	187	13.6%

9.1.9 By the year 2010, the nation would have approximately 25 million youths in age group 17-23. If we take 10 per cent of that population to go for higher education, then the student intake would be estimated at 2.5 million. Such a large number would require a variety of institutions planning, for which should begin now. We visualize a ratio of 50:50 for Arts and Science subjects by the year 2010.

9.1.10 For Professional Education in Pakistan to make any impact on the national development effort, it has become necessary that it be directed intelligently and purposefully towards producing the required manpower. For this purpose, the professional institutions must possess a clear idea about the problems of society and know the size, objectives and directions of the national development endeavour. Serious concern has been shown by the government and society alike on the quality of engineers, agriculturists, lawyers, doctors etc. being produced by professional institutions.

9.1.11 The degree level training in Agriculture Education is imparted by the four agricultural universities and five colleges/faculties established as affiliated or constituent units of general universities. In all the institutions, F.Sc (pre-medical) is the general requirement for admission to first degree course except for the B.Sc (Agriculture Engineering)/ BE (Agriculture) course for which F.Sc (pre-engineering) is a requirement for admission. All first degree programmes are of four years duration. The Master's programme is of two years whereas Ph.D is spread over 3 to 4 years. The universities generally offer first degree programmes for the B.Sc (Agriculture) Hons. B.Sc (AH), DVM and B.Sc (Agriculture Engineering) or B.E. (Agriculture), whereas the colleges offer either B.Sc (Agriculture) Hons or B.Sc (AH)/DVM programmes.

9.1.12 Present enrollment in agricultural universities in Pakistan is 9823 i.e., about 10 per cent of the total enrollment of the universities. It is estimated that by the year 2010, it would increase to 63450. Looking at the growth trends in agricultural commodities, future relationship between scientific manpower and the required increase in output of agricultural commodities need to be defined carefully. It means that the educational institutions may slow down on some categories of agricultural graduates and accelerate on others.

9.1.13 At present, the agricultural universities limit themselves primarily to the teaching function, while research is ad-hoc, often irrelevant, and is done to fulfil the requirement of postgraduate theses or merely as an avenue for promotion and career development. Investment on faculty development in the agricultural universities is thus marginally utilized for national or provincial R&D programmes, which is a gross under-utilization of valuable human resource.

9.1.14 Engineering Education at degree level is imparted by seven public and one private universities and 2 constituent/affiliated colleges. In all the institutions F.Sc. (pre-engineering) is the general requirement for admission to first degree courses. According to the latest figures, present enrollment in engineering universities in Pakistan is 18798, which is about 19 per cent of the total enrollment in the universities. It is estimated that by the year 2010 the enrollment would increase from 19% to 30% i.e., 76140.

9.1.15 The condition of laboratories in engineering universities is generally not good. Much of the equipment lies unused or is out of order because of the lack of appropriate technical supporting staff and maintenance facilities. The huge laboratories are manned generally with conventional laboratory staff (inherited from general universities pattern) possessing Matric or Intermediate science qualifications. At the same time, the faculty is not suitably experienced. There is no special provision in the curriculum or minimum requirement for any practical training and experience for the award of a degree.

9.1.16 It has been observed that 60-80% of the total number of students admitted to the engineering institutions go to the three traditional fields of civil, electrical and mechanical engineering. The engineering projects are diverse and complex requiring specialised training in sub-branches of the above major fields. The demand in emerging fields is increasing and calls for immediate action on the part of engineering institutions to introduce courses on emerging fields at under-graduate level.

9.1.17 Health Education in Pakistan is traditionally under the Health Department of the provincial governments as there is no university in health sciences in the public sector. There are 5 universities in health sciences in the private sector: Aga Khan, Hamdard, Baqai, Zia-ud-din and Isra universities. There are 34 medical colleges both public and private in Pakistan, which are turning out about 4180 graduates in medical sciences both doctors and dentists per year. About 7822 paramedics are trained every year. The latest estimate for medical education shows that by the year 2010 about 15% of the university enrollment in science (i.e., 38070 out of 0.2538 million) would be in the medical profession.

9.1.18 Our doctors and para medics are not exposed to the managerial skills needed for a healthcare system. Increasing technology and specialization have dramatically changed the role of hospitals. It has now become a complex structure and requires specialized handling for smooth operation. The training of doctors for management of hospitals and healthcare units is extremely inadequate.

9.1.19 Bachelor and Master level courses in the field of commerce are being offered in general universities. In addition, commerce education is also being offered at certificate, diploma, degree and postgraduate levels in 20 commerce colleges, 110 commerce training institutes in the public sector and a large number of commerce training institutes in the private sector. However, demand for the professional, as well as, middle level commerce education is expected to increase with the enlargement of the services sector. Commerce education is growing at a faster rate as compared to the past. Graduates in various disciplines are also adopting this profession as their career. It is estimated that by the year 2010 about 30% (76000 students) of the total enrollment (0.2538 million Arts enrollment) would be in commerce education.

9.1.20 Research in this field is almost non-existent. It is, therefore, desirable that research (M.Phil and Ph.D) degree programmes should be initiated at the universities of Sindh, Karachi, Punjab and Peshawar during the 9th Five-Year Plan. The curricula and training programmes need to be modernised and made demand-oriented. Commerce colleges and business education

departments of the universities should be encouraged to develop linkages with industrial and commercial establishments, specially, in the private sector for placement of their students for practical training and for undertaking research projects relating to specific problems.

9.1.21 Legal Education is being offered at almost all general universities at different levels ranging from certificate/diploma to Ph.D and LL.B. degrees. Special courses in Islamic Law are being offered at the International Islamic University, Islamabad, and Islamia University, Bahawalpur. In addition, a large number of private colleges are also offering LL.B. level courses. The UGC has recently revised the curricula of legal education in collaboration with the Pakistan Bar Council and has introduced a three-year LL.B. programme at all universities imparting legal education. Latest estimates suggest that by the year 2010 about 10% of the total enrollment in higher education (25380 out of 0.2538 million of arts enrollment) would be getting legal education.

9.1.22 The curricula and training programmes at all levels need to be modernised/updated. Also, mushroom growth of colleges in the private sector needs to be checked. Law colleges and departments of the universities should be encouraged to develop Linkages with counterpart institutions imparting legal education abroad and to undertake research relating to specific problems.

9.1.23 Colleges serve as nurseries to institutions of higher education and occupy a crucial position in the system. It is, therefore, important that they should be well looked after. In order to enable them to fulfil their important role, adequate facilities in terms of physical, financial, residential, laboratories, libraries, student support services and a congenial academic atmosphere must be provided.

9.1.24 The Pakistani system of higher education confers a general Bachelor level degree at the end of 14 years of schooling. Except for England, Australia, India and New Zealand, which have 15 years course for Bachelor's degree, the rest of the world follows a 16 years Bachelor degree course. One of the reasons for the non-recognition of our degrees abroad is this short duration of study at the degree level. In Britain, our Bachelor degree is considered as equivalent to British 'A' Level qualification. Almost all the policy documents and reports of the past have highlighted the importance of a minimum three year degree programme.

9.1.25 A right step was taken by the Government of Pakistan in the early sixties when a three-year degree course was introduced following the approval of the recommendations of the Sharif's Commission Report of 1959. Due to strong student protest, the government of the day, however, reverted to the two year degree course.

9.1.26 All over Pakistan a large network of degree colleges exists. The universities, which already cater to the needs of Master and above level degree courses, must exclusively concentrate on Master, M.Phil. and Ph.D degree studies. The degree colleges already have 4 year studies but that includes two years of Intermediate and 2 years of B.A./B.Sc. courses. A number of intermediate level colleges are also working in the country. The intermediate level

must be separated from the degree colleges and should be made part of higher secondary schools.

9.1.27 Degree colleges are affiliated with the respective universities according to the area of jurisdiction. Through the system of affiliation, higher education is controlled by the universities while at the same time providing for a large portion of the population by means of a network of degree colleges, spread over far-flung areas. These colleges impart education at first degree level. Some affiliated colleges also run postgraduate courses, and are duly recognized by the universities for this purpose.

9.1.28 The vast system of college affiliation with respective universities has outlived its utility and has been stretched too far. The system of affiliation seems to have contributed significantly to the deterioration of academic standards in the country and has had less attention from the government for investment and improvement.

9.1.29 In view of the alarming situation and the inability of the universities to control the deterioration of standards of higher education, it would be feasible if this responsibility be shared with degree colleges. Better degree colleges be given degree awarding status and the autonomy to have their own syllabi and conduct their own examinations.

9.1.30 There is a general feeling that the quality of education has deteriorated rapidly and the present system has not responded to a large number of inputs made for raising the quality. The annual reports of the Federal and Provincial Public Service Commissions and other such recruiting bodies often point out the low quality of our higher educational institutions.

9.1.31 The question of quality is directly related to the quality of teachers and students and the support services provided to them by the educational institutions. The level of competence of teachers, curricula and the standards of students intake are the main contributing factors in the deteriorating quality of higher education. However, inadequate funding for student support services, libraries, journals, books, ill-equipped laboratories and lack of repair facilities for equipment and non-qualified staff are considered to be crucial factors in the low quality of education. The university budget is consumed by salaries and other allowances, and thus little is left for the items so essential for raising the quality of education. Budgetary constraints, particularly for operation, adversely affect the quality of teaching, specially practical training. Resources for research are negligible hence, postgraduate and staff research cannot be meaningful.

9.1.32 While the quest for quality has become a watchword all over the world, this aspect has not received sufficient attention it deserved, in Pakistan. In other countries, we find an increasing emphasis on this aspect in the establishment of quality councils, provision of quality assurance mechanism, performance indicators, academic audit, strategic planning and management, accountability and publication of league tables and ranking order of universities in teaching, research and provision of student support services.

9.1.33 At present, interaction among the universities, R & D organizations and the industry in Pakistan is nonexistent. As the financial resources are limited, essential facilities can only be provided if there is no overlapping and duplication. Industry is neither advanced enough nor properly motivated to participate in the research efforts of the universities and the R & D organizations. There is, therefore, a dire need for lasting links to be established among universities, R & D organizations and the industry to develop teaching, research, science and technology in Pakistan. Perhaps a Federal Law is needed to make such Linkages mandatory.

9.1.34 Much of the strength of the graduate study programmes and the quality of research is determined by the quality of the teachers. The teacher is the central figure of the whole process. It is, therefore, important that his position is strengthened so that this profession could attract the best of the society's brains. Advanced level training of the teachers is, therefore, vital for quality higher education.

9.1.35 Qualified manpower is a prerequisite for advancement of knowledge, promotion of research and the socio-economic development of the country. The availability of such manpower is possible only through institutions of higher learning having well equipped laboratories, properly maintained libraries, conducive environment and necessary expertise which could provide leadership and guidance. Since advancement in scientific knowledge has made research a very sophisticated team-activity, a Ph.D degree is the minimum requirement to enter a research career.

9.1.36 Unfortunately, due to the lack of adequate training facilities for university teachers, the present position of teachers with Ph.D degree in the universities is alarmingly low. The number of staff members with Ph.D ranges from 9% in the NWFP University of Engineering and Technology to 66% in Quaid-i-Azam University. In fact, if the present day requirements of research are to be met, then the number of staff with Ph.D degrees has to be substantially increased. The present day training schemes for research degrees at home and abroad, are insufficient for this purpose. A more dynamic approach is needed.

9.1.37 A large number of teaching staff needs higher qualifications. This is also substantiated by the conclusions of the study conducted by the Ministry of Science and Technology (1987, p.4) that most of science and technology facilities in the 20 universities were limited and the faculty was weak in qualifications. The study further found an acute shortage of qualified staff in about 85 R&D organizations and analyzed that the most of our existing Research and Development institutions, have only 2 to 4 Ph.Ds. Thus, research in these organizations is mainly in the hands of those who are without research degrees.

9.1.38 Efforts have been made in the past to train manpower for institutions of higher learning through Central Overseas Training Scholarships (COTS) and other scholarship schemes. However, due to the high cost of training abroad, a limited impact could be made on faculty development. Only 43 COTS were available for all the universities having about 6000 faculty members and, therefore, only 1% of the teaching staff could be trained. We need a wide range of faculty development programmes for university/centres teachers to fill the gap of qualified manpower.

9.1.39 The present and future shortfall in qualified manpower is not sudden. It is rather a logical consequence of our past policies and attitudes towards faculty development. We have always depended heavily on foreign training of our manpower which has really failed to achieve the desired objective in making the country self-sufficient in faculty development.

9.1.40 The future scenario is more alarming when we see that by 2010, a large percentage of our qualified faculty in the universities will retire. If proper arrangements for their replenishment are not made, the situation will be critical.

9.1.41 Hence in order to develop our university faculty, we need to evolve a strategy which should ensure simultaneous development of our institutions, as well as, the initiation of our own Ph.D programmes. This will not only help us in producing our own much needed highly qualified manpower through indigenous resources but will also accelerate research activity within the country. The best way to promote local Ph.D programmes is the introduction of split Ph.D programmes in collaboration with foreign universities through Linkages.

9.1.42 Our present postgraduate study programme constitutes an important means of advancing research in the universities. The quality of these programmes varies depending upon the facilities for research. Only a few institutions have postgraduate study and research programmes which measure up to international standards. In social sciences and humanities, the condition is far from satisfactory. In social sciences, there has been a general shortage of research oriented programmes in important disciplines of economics, sociology, psychology, philosophy, political science, anthropology, history etc. Obviously, this weakness is related to the shortage of manpower, lack of interest of talented students to take up higher studies in social sciences, and lack of library and research literature facilities. In essence, neither the postgraduate study programmes are extensive enough, nor, by and large, of sufficiently a high quality. Accordingly, this important means of advancing research is inadequately utilized.

9.1.43 Research in the universities can also be built up on research programmes around highly qualified teachers. All promotions to higher cadres in the universities are conditional to acceptable research performance (publication of results of research in journals of international repute). Also, the better is the quality of research, the greater are the opportunities for attending international conferences, and international recognition. Although, in some departments and institutions reasonably good research is undertaken, yet, this important and, perhaps, vital aspect, leaves much to be desired due to the limited number of active scientists.

9.1.44 The major problem facing almost all the developed and developing countries, is the dilemma that arises from continued high social and individual demand for access to various forms of studies and educational services at a time of growing constraints on public budgets. This situation is a principal source of strained relations between the state on the one hand and higher education on the other. The public expenditure on education has always been inadequate owing to continuous increase in costs. The educational expenditure is becoming increasingly heavy.

9.1.45 Higher education and research are capital intensive and are heavily subsidized. The federal government has picked up the liability of funding higher education since 1979. The recovery of the cost of higher education is minimal. It seems, therefore, desirable that expenditure on higher education should be shared in some reasonable form between student's fee, contribution from the management of universities and the government. Management of universities should raise a substantial amount of money from alumni and philanthropists.

9.1.46 The self-financing scheme was introduced in 1994 and implemented in universities by creating additional seats. Funds generated through this scheme are being utilized on research and other necessary requirements of universities. Admissions under this scheme are done on merit of the applicants who are generally just below the merit list. Their performance has been good and their parents have exerted pressure on them for diligent studies.

9.1.47 The self-generation of funds by the university sector, currently, is about 35% of the total recurring budget of the universities. We envisage that this percentage will rise to 50% of the total budget of the university sector by the year 2010. Currently, the total budget of the public universities is 3.1 billion rupees.

9.1.48 Since the late sixties, Politics has become an integral part of university education. In a country with a low level of literacy and government monopoly on jobs, the student segment of the society is the only independent sector where the political parties can make inroads. The student federations have become powerful enough to virtually take over the administration. Almost every political party has its student wing at the campus which uses the students for their designs and motives. Alongwith that, there are academic staff associations and unions of non-teaching employees. As a result, there is a complete breakdown of discipline in our universities. The purpose of the unionization of the campus population is not the development of professional advancement, but to work for accelerated promotion, better perks and degrees without work.

9.1.49 One outcome of this politics of higher education is that the university administration is virtually hostage to the unions. This has eroded the entire system of higher education including appointments of university teachers and other staff, admissions and examinations etc. Though there is a ban on student unions, nevertheless the students hold sway over the campuses. To some, this is a symptom and not the cause which they attribute to the ineffectiveness of the learning process, induction of ineligible students, lack of entry tests, unemployment and almost free university education. The example of private universities like the Aga Khan, Lahore University of Management Sciences and GIK Institute are cited as examples of good administration. Unless some effective measures, such as, the enhancement of tuition fees, entry tests, consensus of political parties on non-interference on the campuses are taken, the situation would not improve.

9.1.50 On the issue of campus violence, the National Education Policy 1992 recommended that "eradication of campus violence will receive top priority in the management of education on campuses. The teachers and educational administrators will be vested with more authority to deal with acts of indiscipline. A code of ethics for students and teachers will be enforced for

regulating their activities on the campus. Fresh inputs will be made to harness the creative activities of students in sports and co-curricular activities. Students will be exposed to extensive guidance and counseling. Special attention will be paid to the improvement of corporate life on the campus."

9.1.51 Pakistan as a nation has to bring back sanity on the campuses and restore the sanctity of the educational institutions, if it wishes to occupy its rightful place among the comity of nations in a very competitive world of the 21st century. Unless and until peace is brought back to the campuses, and the authority of the administration is restored, the academic standard will not improve. If the students cannot be made to attend classes, enjoy unlimited number of holidays on one pretext or another, they stage walkout from examination on petty reasons, therefore all the efforts to impart a meaningful education and to raise standards, does not bear any fruit.

9.2 Objectives of Higher Education

9.2.1 The purpose of higher education is not simply to impart knowledge in certain branches of knowledge, it has a deeper meaning and objective. The purpose may be multidimensional and may be termed as personal, social, economic, and cultural. In the context of Pakistan, it has ideological meanings attached to its purpose, as well. Education, and particularly higher education, cannot be divorced from its milieu and social context. Religious, moral, historical, and cultural ethos permeate through the fabric of the educational system of the country. The context of higher education in Pakistan, therefore, is to be within the Islamic ideology which is the genesis of Pakistan and its cultural and religious traditions. This context is enshrined in the Constitution of Pakistan and in the Objectives Resolution. As an ideological state, Pakistan cannot ignore its ideological moorings, national unity, socio-economic development and the needs of modern society for building a competitive nation whose individuals must be scientifically trained to be able to contribute to the development of the country. Thus, the underlying purpose of higher education would be guided by the Holy Qur'an and the Sunnah through inculcation of Islamic ideology and moral values, preservation of our religious and cultural heritage and to equip the individuals with the latest knowledge and technology.

9.2.2 In the historical context, a brief overview of the aims and purposes which have been emphasized by various education policies would be pertinent. Since independence, four major education policies have been implemented. A perusal of the National Commission on Education, 1959, the New Education Policy, 1972-80, the National Education Policy, 1979 and Education Policy 1992, shows that all of these policy documents emphasized a commonality of core themes, which among others included: (a) ideological base, (b) national unity, (c) individual development, (d) societal development, (e) economic progress, (f) equality of education and (g) quality of education. These objectives generally seem to be more diffused and overlapping rather than well defined and achievable.

9.2.3 Education is the medium and vehicle for the preservation, transmission and promotion of cultural values and provides the means to realize the objectives through the process of

curricula, teaching and learning. This policy document takes the view that fostering national aims and objectives is the basic underlying philosophy of education. The country, in order to achieve the vision of a developed nation, needs to enhance the level of skills of its population and to produce highly educated and technically skilled manpower. Such an endeavour would need large spending and a commitment which will be reflected not in words but in deeds.

9.2.4 We are aware that the nature of technological advancements and rapidly changing pattern of scientific developments and the need for acquiring new skills have introduced the concept of lifelong learning in the modern world. The concept of traditional education and learning confined to a residential place for a specific period is no longer valid. Therefore, the individuals have to continuously update their education, training and knowledge. The purpose of higher education also, should take into account this aspect, as well.

9.3 Policy Provisions

The educational system in Pakistan at all levels will lay emphasis on the following:

9.3.1 The students must be good Pakistanis, conscious of their cultural heritage.

9.3.2 Become a moral human being with a forward looking attitude.

9.3.3 Acquire student must have a sufficient base of scientific knowledge to enable him/her to contribute in nation building efforts in the 21st century.

9.3.4 Promote intellectual faculties and develop capabilities of individuals so that they can contribute to society.

9.3.5 Highly educated and technically skilled manpower be produced in sufficient number as required by the country.

9.3.6 The access to higher education will be expanded to at least 10% of the age group (17-23) by the year 2010. Based on the above recommendation a total of 2.5 million students would need places in higher education institutions.

9.3.7 Merit will be the only consideration for entry to higher education. Access to higher education, therefore, will be based on entrance tests.

9.3.8 New disciplines/emerging sciences will be introduced in the public sector universities.

9.3.9 Public sector universities will be encouraged to enlarge their intake by establishing additional campuses, ensuring all necessary academic, administrative and financial infrastructure.

9.3.10 Through the provision of better student support services, better teachers and good management, the present wastage rate will be drastically reduced.

9.3.11 Selected disciplines at major institutions will be transformed into 'Centres of Advanced Studies and Research.' These centres will function as growth points for quality education and research and breeding grounds for trained manpower.

9.3.12 The client organizations will be adequately represented on the top management, policy advisory, programme planning and monitoring committees of professional education institutions.

9.3.13 Allocation of resources to professional education will be enhanced to ensure its functioning at an optimum level with the ultimate objective to enhance its contribution to the GDP.

9.3.14 Revision of the curricula for agricultural, medical, engineering, legal and commerce education will be done to meet the challenges of the 21st Century.

9.3.15 Institutions of professional education shall be encouraged to generate internal resources, as far as possible, and financial management procedures will be suitably modified to facilitate this.

9.3.16 Provincial research institutes working independently will be merged with respective agriculture universities to boost research.

9.3.17 In Pakistan, we award the first degree after 14 years of study. In order to come to international standards and yet not disturb the existing academic structure, the following proposals are made:

a B.A./B.Sc. should continue as at present;

b One year B.A./B.Sc. (Honours) course after B.A./B.Sc. should be started in all the colleges;

c For entrance to universities, preference will be given to those students who have done Honours course;

9.3.18 Government recruitment policy should be changed to insert B.A./B.Sc. (Honours) degree wherever B.A. is provided as a minimum degree.

9.3.19 Better degree colleges will be given autonomy and degree awarding status so that they are able to pursue their own courses of reading and also serve their surrounding area.

9.3.20 Degree colleges will be free to join any university or degree awarding institution for examination and award of degrees.

9.3.21 In order to improve the academic life of degree colleges, intermediate classes will be bifurcated from degree classes.

9.3.22 Funds will be provided to improve buildings, libraries, laboratories and student support

facilities of the degree colleges. Adequate educational and scientific equipment will be provided to all colleges.

9.3.23 Socio-cultural life of colleges will be revived by encouraging debates, co-curricular activities.

9.3.24 Tutorial system will be reorganized to provide guidance and counselling services to students.

9.3.25 Selection of teachers and non-academic staff will be done on merit.

9.3.26 The funding of education be raised to 4% of GDP with enhanced allocations for universities.

9.3.27 To attract highly talented qualified teachers, the university staff will be paid at higher rates than usual grades. A proper service/promotion structure would be worked out.

9.3.28 A requirement for external and internal academic audit will be made compulsory for all the institutions of higher education. Funds will be allocated on the basis of their performance.

9.3.29 The libraries and laboratories of colleges/universities will be strengthened to meet international standards.

9.3.30 The training of technical staff and maintenance of scientific equipment would be emphasized. Equipment Repair Centres and workshops will be established.

9.3.31 Curricula of the universities, particularly in natural sciences and professional subjects will be revised and adjusted to requirements of industry and brought to international standards.

9.3.32 Special measures will be taken for the development of statistical data and information system for analysis of key issues of higher education.

9.3.33 At present, there are too many holidays in the educational institutions. Educational institutions will be required to work full 8 hours per day.

9.3.34 In order to enhance the status of professional librarians, their status will be brought at par with teachers.

9.3.35 A proper service structure will be developed for laboratory and technical staff of universities and colleges.

9.3.36 Representation of industrialists on university authorities will be encouraged.

9.3.37 Interaction between universities and industries will be arranged so that the students can

apply their knowledge to real life problems.

9.3.38 Technology parks and industrial research centres will be established in the universities to achieve this goal.

9.3.39 Commercialization of research findings and new technologies developed in the universities will be encouraged.

9.3.40 The university departments should hire marketing managers who should market the research findings of the universities and get research projects for the universities. University and industry should enter into joint research projects through various ways such as collaborative and cooperative teaching, joint or contract research, joint consultancy and joint venture companies.

9.3.41 Local higher degree programmes will be launched on a large scale in the Centres of Excellence (COEs) and other university departments by inputs to the university departments in terms of strengthening their laboratory and library facilities.

9.3.42 Split Ph.D programmes will be launched in collaboration with reputed foreign universities, whereby, the teachers will undertake a part of their degree programme in local institutions, while completing their studies abroad for the rest of the period. About 100 scholars shall be annually trained under this arrangement.

9.3.43 Linkage programmes with universities in foreign countries will be developed to promote international cooperation and academic mobility through which programmes like research collaboration; short-term and long-terms visits of faculty members and exchange of material be developed.

9.3.44 The system of assessment of the teachers performance will be introduced for improvement of teaching learning process. Methods of self-assessment by teachers be introduced. The mechanism and assessment proforma shall be designed with the help of Vice-Chancellors' Committee.

9.3.45 A teachers Service Training Academy will be established for imparting intensive in-service training in field, such as, educational management (admin and financial), curriculum development, research methodology and teaching methods.

9.3.46 There should be strong Linkages between the universities and the communities in which they are located. The universities must play the role of agents of change in their areas of jurisdiction.

9.3.47 Along with the present tenure system, a contractual system of appointment for teachers will be introduced in the universities and colleges.

9.3.48 Initial appointment of a university lecturer will be in grade 18 and a university professor

shall be placed in grade 21 and meritorious professor in grade 22.

9.3.49 Goal oriented quality research of applied nature related to pressing problems of socio-economic and industrial significance will be supported on priority basis.

i The areas of research will be prioritized and ranked in accordance with their usefulness for economic development of the country alongside development of human resources.

ii Research should be carried out by encouraging research students and producing local Ph.D

9.3.50 In universities, the balance between teaching and research should be shifted in favour of research. University budget should be reconstructed to support relevant research programmes. At least 10% of annual recurring budget of each university will be allocated for research.

9.3.51 Dissemination of research activities and results will be institutionalized, and all researchers would submit their programmes and progress for critical appraisal through seminars and conferences.

9.3.52 The funding of education be raised from the present 2.2% of GNP to 4% with enhanced allocations for universities. Funding for higher education should be increased to at least 1% of the GNP by the year 2000 and 2% by the year 2010.

9.3.53 Universities will be encouraged to generate internal funds through contract research, internships, consultancy services and through other resources.

9.3.54 Import of educational equipment will be exempted from all types of taxes.

9.3.55 Portions of Ushr and Zakat accumulations will be used for educational purposes.

9.3.56 Universities and institutions of higher education be encouraged to admit students under self-financing scheme.

9.3.57 Poor and meritorious students will be given waiver of fees subject to continuous good academic performance.

9.3.58 A Dean of Students Affairs be appointed in each educational campus for promoting and regulating the co-curricular activities of students. He will also act as Ombudsman to deal with the complaints of students.

9.3.59 Extensive guidance and counselling services will be provided through teachers for promoting the welfare of students.

9.3.60 Placement services will be established on each campus for providing information and guidance related to job opportunities and career planning.

9.3.61 A code of ethics will be enforced to regulate the corporate life of students on the campus. Carrying of arms and ammunition of any type within the premises of the campus will be banned and dealt with as a penal offense.

9.3.62 Teachers will be vested with powers to deal with acts of hooligans and impose penalties on culprits.

9.3.63 All students will be assigned community work during summer vacations.

9.3.64 Vice-Chancellor will be vested with full authority to expel a student if he/she is not satisfied with his/her conduct and behaviour.

9.3.65 All quota/reserve seats will be eliminated. Students from backward areas, who clear entry tests, would compete amongst themselves.

9.3.66 The schedule of classes, (the training programme, the number of lectures to be delivered), holidays and examination be printed and circulated at the beginning of the session. Admission of students who do not attend 75% classes, be cancelled. Only one re-admission, after a heavy fine, be allowed. In no case, a student be allowed to sit in the examination, if overall attendance is below 75%.

9.3.67 Change of dates of examinations, examination forms, or examination centres, not to be allowed under any circumstances.

9.3.68 The political and union activity by students, teachers and employees be banned on the campuses. Only subjects societies which could enhance academic excellence, sharpen intellectual activities and promote creativity, will be encouraged.

9.3.69 A "Grievance Committee" will be constituted to look into the genuine needs and problems of the teachers, employees and students.

9.3.70 The federal government should constitute the National Council for Academic Awards and Accreditation under University Grants Commission. NCAAA shall accredit and grant degree awarding status to institutions of higher learning (public and private).

9.4 Physical Targets

9.4.1 This Policy suggests a provision for three universities in the public sector in health sciences by upgrading King Edward Medical College, Lahore, Liaquat Medical College, Hyderabad and Khyber Medical College, Peshawar. The main characteristics of the new universities would be not only to turn out medical graduates but also to carry out meaningful

research in medical sciences. These three universities may affiliate the medical colleges and thus would be able to provide professional guidance to the institutes of medical sciences to help improve the quality of medical education in Pakistan. The expertise and specialists are available in Pakistan.

9.4.2 The implementation programme has to be designed keeping in view the suggested yearly increase in enrollment in the universities and colleges. The present participation rate of 2.6% of the age group 17-23 years would need to be enhanced to 10% by the year 2010. According to the year-wise break-down of the projected enrollment, the participation rate at the tertiary level would be increased to 5% by the end of the 9th Five Year Plan or by the year 2002-2003. It would be increased to 10% by the end of the Policy Period i.e., by the year 2009-2010. In order to cater for the increased enrollment by the year 2002-2003 in the university education, seven new public universities and ten new private universities would be established. By the end of the Policy Period (2009-2010), twenty one new universities would be established. The break-down of these 21 universities would be as under:

General universities	10
Medical universities	3
Affiliating universities	4
Open universities	4
Total:	21

9.4.3 In case of college education, 100 new degree colleges would be established by the year 2002-2003 and 500 by the year 2009-2010. In case of professional colleges, 50 new professional colleges would be established by the year 2002-2003 and 250 by the year 2009-2010.

9.5 Implementation Strategy

9.5.1 The implementation and monitoring in order to be successful requires the setting up of an accurate and reliable database which may facilitate the preparation of logical planning and effective programmes. There is therefore a need to have a Management Information System (MIS) at the apex bodies like the UGC and the provinces. There is a need to strengthen the professional expertise so that the task of evaluation and monitoring can be accomplished with a high degree of professionalism. The UGC will design performance indicators for each project initiated under the Education Policy.

9.5.2 The present ratio of Arts and Science subjects of 71:29 will progressively be brought to 50:50 through the process of education planning.

9.5.3 Institutional diversity will be the answer to stipulated greater access to higher education. In order to train the manpower, a large number of technical, vocational institutions would be needed.

9.5.4 There is one Centre of Excellence on Water Resources Engineering at the University of Engineering & Tech., Lahore. In this context, it is proposed that more Centres of Advanced Studies and Research be established.

9.5.5 The executive head should have the managerial and leadership qualities and should be assessed before appointment. Administration of colleges will be decentralized.

9.5.6 Quality of higher education will be enhanced through measures, such as, academic audit, revision of curricula, strengthening of libraries and laboratories, liberal grants, institutional capacity building, staff development, resource allocation, research funding, improvement of infrastructure and better student support services in institutions of higher education.

9.5.7 Community colleges will be established keeping in view the special needs and available technical know-how of a particular area. New disciplines/emerging sciences will be introduced in the public sector universities.

9.5.8 The education programmes with national development plans in various fields such as agriculture, industry, health etc. to ensure optimum utilization of the educated manpower.

9.5.9 Emphasis would be given to make the curriculum flexible so as to be responsive to the changing structure of the market. The curricula shall encourage thinking, creativity, and project construction ability.

9.5.10 Curriculum for science, engineering and technological disciplines shall be made compatible with international standards and matching the needs of the next century by developing libraries and laboratories. Professional base for curriculum development shall be enlarged by maximizing the representation from industry, business institutions and research and development organizations.

9.5.11 Latest electronic gadgets, including computers, internet and e-mail service terminals, would be provided in the universities for ensuring prompt supply of information.

9.5.12 The existing technology degree programmes have lost direction. In order to achieve the desired objectives of training human resources for meeting the needs of industry, the present status of colleges of technology will be enhanced in terms of intake, course contents and industrial orientation.

9.5.13 More emphasis will be given to on-job training of agriculture graduates by making them work in agricultural extension services.

9.5.14 Efforts would be made for developing linkages and liaison between engineering universities and industrial establishments for practical training of engineering graduates.

9.5.15 Animal husbandry and veterinary science graduates would be required to undertake guided research/surveys as part of the requirement for the degree.

9.5.16 To improve practical skills and to inculcate a sense of inquiry, laboratories in science and technology at college and university levels will be equipped with required machines and materials.

9.5.17 To lessen the burden of examinations on the universities and to make them more productive in their teaching and research responsibilities, one of the leading colleges will be declared as a sub-campus of university for B.A/B.Sc. examinations. The infrastructure at these colleges will be developed to bring them to standards where they can be given degree awarding status. They can then be expanded into general universities at a later stage.

9.5.18 The provision of distance education needs to be expanded. It is, therefore, suggested that open universities be established wherever needed.

9.5.19 The present system of examination will be further improved to have a continuous system of evaluation. Universities may continue to have diversity of examination systems on annual, term or semester basis. The system of external moderation shall also be vigorously pursued for objective assessment of students and the credibility of the system.

9.5.20 The system of examinations should discourage rote learning and emphasis should be laid on the acquisition of real knowledge. Multiple choice (objective-type) papers will be introduced in examinations, whereby, the depth of knowledge of the students over a wide field could be assessed.

9.5.21 The examination departments of the universities will be reorganized and provided training in management skills. Examination departments of the universities will be fully computerized.

9.5.22 As an immediate measure to relieve some of the larger universities of the burden of external examinations, a suitable administrative reorganization of the examination branch is suggested. This may be in the form of a Pro-Vice Chancellor for external examination or a second controller of examinations for external examinations heading a separate examination branch or any other suitable arrangements deemed necessary by the Vice-Chancellor.

9.5:23 The National Testing Service will be established for professional colleges, universities and institutes of higher learning.

9.5.24 Like Graduate Record Examination (GRE) and Test of English as Foreign Language (TOEFL) of USA, the National Testing Service should provide for testing of all interested candidates twice or thrice a year.

9.5.25 It is necessary to introduce demanding entrance examinations for entry to higher education which test the intelligence, aptitude and ability of the prospective candidate before admission into universities is allowed. Admission should be granted on the basis of a separate entrance examination with adequate weightage to the earlier examinations.

9.5.26 The system of assessment of the teacher performance will be introduced for improvement of teaching learning process. Methods of self-assessment by teacher be intrduced. The mechanism and assessment proforma shall be designed with the help of Vice-Chancellors' Committee.

9.5.27 Inter-University faculty exchange programmes for short/long term be encouraged.

9.5.28 Loan facilities for higher studies be extended to the teachers. Liberal scholarship/ fellowship schemes be launched at M.Phil/Ph.D level preferably in scientific and technological fields.

9.5.29 Immediately 200 Ph.D scholarships for existing and emerging technologies and selected fields be launched for university teachers. On completion of their studies, their services will be utilized by the universities concerned and educational institutions.

9.5.30 An endowment of national research fund of Prime Minister Development Fund for Rs.one billion will be created for promotion of research in universities.

9.5.31 Industry shall set aside 1-2% of their budget for R&D work.

9.5.32 Each department producing Ph.Ds. will be given additional grant for expansion of facilities and instituional strengthening.

9.5.33 Extensive guidance and counselling services will be provided through teachers for promoting the welfare of students.

10. INFORMATION TECHNOLOGY

10. INFORMATION TECIINOLOGY IN EDUCATION

10.1 Conceptual Framework

10.1.1 The Information Superhighway, as a result of convergence of telephones, computers and television technologies, has opened new vistas of opportunities and access to diverse sources of knowledge to the end-corners of the world. The transfer and usage of software through the Internet has become, for many researchers, an essential tool of research. The Internet can provide a cheap way of gaining information. This can have powerful benefits for accelerating the distribution of scientific knowledge. It has also stopped the isolation of scientists. By bringing researchers from all over the world into intimate intellectual contact with each other and with the data and theories that they produce, the Internet has become a tool that is at least a convenience and at best an indispensable device. It has great potentials for improving the quality, efficient management, effectiveness and access of higher education to a vast population of students.

10.1.2 The digital revolution is going to alter drastically higher education. It is anticipated that institutions will come up to offer a diversity of courses to the needs of individuals globally and learners will be connected with far off institutions for their courses etc. It has put at the disposal of academic community the vast databank on a worldwide basis. Laboratories around the world are in effect sharing a common chalkboard-the Internet. Theories and experimental results are all being shared electronically, with the geographically dispersed community. Internet, thus, provides for the third world vast opportunities for the development of science and technology.

10.1.3 The ease and low cost of setting up World Wide Web is taking a much more valued instrument and is the ideal medium for presenting knowledge. The combining of such new technological possibilities as Hyper Text or World Wide Web pages and the possibility of publishing Web pages for teaching, have certainly enhanced educational opportunities, particularly for distance learning. The e-mail has speeded up worldwide interaction and become the informal "corridor" of the international research. It has allowed researchers to expand the circle of colleagues with whom they consult. Online communication is even more equalizing than the printing press. It makes geographical distance irrelevant, when the speed of light is the mode of transport, all places on earth are the same.

10.1.4 The advent of Information Superhighway shows that education need no longer be limited to face-to-face learning situations. Learners can choose their own place, time, and mode of study. The school is no longer the sole provider of knowledge. Mass communication media such as television, computers, particularly the Internet are playing a crucial role in the dissemination of knowledge. Information Technology will continue to be pervasive and multi-dimensional in providing access to learning. With the application of Information Technology, teaching-learning situations have multiplied and diversified. Using technology to instruct, and tailoring learning programmes to meet the needs of learners, is now an important factor and challenge in meeting the educational needs of students. Thus, the use of Information Technology (IT) has unlimited potential for distance education.

10.1.5 The Dearing Report (1997) has anticipated that over the next century, higher education services will become an internationally tradable commodity within an increasingly competitive global market. According to the report, the development of a world market in learning material, based on Information Technology, will lead to the formation of trading partnerships between institutions for the provision of infrastructure, services and content.

10.1.6 Information Technology is developing as a major industry in the world. Several small countries have become major Information Technology producers or sophisticated users. The potential of Information Technology as industry in Pakistan has yet to be capitalized. The Government of Pakistan has already shown deep interest in it. However, for such an interest to bear fruit, there is need for a platform for both the public and private sectors to communicate with each other. The most important question from our point of view is, how can we benefit from this revolution for the development of our education and give access to our teeming millions who cannot afford books. How can we use it for the distance learning process? The means and expertise are required to utilize and disseminate information. In addition to this, the country also needs highly trained computer scientists and engineers. They would carry out research and development in this field and provide effective teaching and training support to academia and industry as well as the intellectual backing for software industry to be able to compete at the international level.

10.1.7 All this requires appropriate technology, adequate resources, staff development and effective management and implementation. In Pakistan, the Internet culture has taken a lead but due to financial problems and other barriers our institutions of higher education have not really benefited from this. Local area networks in the universities have not been so far developed. The cost of the equipment is very high and beyond the reach of a university student. Therefore, students and teachers have not been able to take advantage of the information revolution and have no access to Information Technology.

10.1.8 The investment in Information Technology infrastructure and its network will bring our institutions of higher education on to world map in providing higher education. Therefore, we need to encourage Internet access and gateways for the purpose of teaching and learning and develop electronic libraries for online delivery of higher education to a vast student population. We have to realize that Information Technology promises a great future and can play vital role in enabling institutions to overcome their present isolation and shortage of resources. This is particularly vital in view of present resource constraints accompanied by increasing number of student population. The investment in Information Technology can help overcome this drawback. We, therefore, need to fully exploit the advantages of this technology to our benefit.

10.1.9 Our universities need to concentrate on Information Technology and should use its vast scope for developing teaching and learning resources and improving the quality of education as well as linking themselves with the scientists in other countries.

10.1.10 The facilities of e-mail via the Internet will be provided to all institutions of higher learning.

10.1.11 Centres of Advanced Computer Sciences and Information Technology shall be established in all the universities.

10.2 Objectives

10.2.1 To modernize education in Pakistan via the application of Information Technology.

10.2.2 To emphasize different roles of computers as a learning tool in the classroom, learning about computers and learning to think with computers.

10.2.3 To provide Internet access to libraries around the world for speedy access to the international source of knowledge.

10.2.4 To popularize Information Technology among children of all ages and prepare them for the next century.

10.2.5 To employ satellites and related communication technologies for the training of teachers and educational activities.

10.3 Policy Provisions

10.3.1 Computeracy (computer literacy) will be spread among all educational planners and managers and will be made an integral part of all management training courses conducted at Federal and Provincial levels.

10.3.2 Computers will be introduced in Secondary Schools.

10.3.3 School curricula will be aligned toward recent developments in Information Technology such as software development and the Information Super Highway, and Designing Web Pages etc.

10.3.4 Educational institutions will be provided Internet facilities.

10.3.5 The subject of computer education/science will be introduced as a subject at higher secondary and degree levels in phased manner.

10.3.6 A crash programme for the training of teachers will be launched with the assistance of computer science departments in the universities.

10.3.7 Computer education will be a compulsory component for all training programmes in the education sector.

10.3.8 Satellite (PakSat-2) when functional, will be used where mass education and training

efforts are involved, such as teacher training.

10.3.9 Application of Multi-media at various levels of education will be introduced.

10.3.10 Software development competition (incentive based) will be launched at national level for school and college students and others.

10.3.11 Incentives in the form of match grants will be provided to the private sector to open high quality training and research institutes in computers and electronics.

10.3.12 Amateur Computer Clubs will be encouraged in collaboration with Private enterprises.

10.3.13 A Cyber-Institute will be established in Islamabad. This will provide access to the Internet, thus making it available to those who would like to further their knowledge from within their homes. Course materials will be developed using hyper-text, and multi-media technologies and placed in a Server (computer) for instant access. Students in Pakistan and in other countries can automatically enrol in different courses. Assignments of multiple choice can be retrieved by the student for instant evaluation. Cyber-Institute will not require huge physical infrastructure, it will be the most cost effective educational institution of its kind in Pakistan.

10.4 Physical Targets

10.4.1 In 1,000 secondary and vocational institutions, computer labs would be provided. About 1500 computer teachers would be appointed/trained for computer education in these institutions.

10.4.2 All university teaching departments, and 200 colleges will be provided Internet connections. In addition, Cyber-Institute will be initiated as a pilot project by AEPAM.

10.5 Implementation Strategy

10.5.1 With the exception of universities, several educational institutions in the country lack electricity let alone any computer facilities. Application of Information Technology will inevitably require, not only a continuous flow of electric power and appropriate physical environment, but also computer expertise. A suitable curriculum and computers for teaching are other necessities. Each institution will need a computer lab equipped with at least 10 computers. Besides meeting the huge cost, to be successful, Inforamtion Technology application will depend on the availability of trained teachers.

10.5.2 Information Technology will be included as a subject in the new stream of technology being introduced under the policy. Curriculum will be developed catering to the needs of the next millennium and in line with UNESCO's guidelines. Computer training will be introduced in teacher training institutions to prepare teachers for their new role as teachers of computer-education in schools. Computer Science Department of the Universities will be involved in this effort to ensure quality training. At least one boys' and one girls' school in each District will be identified for providing a computer laboratory.

10.5.3 Committee of computer specialists shall be formed and PakSat2 would be engaged for educational campaign. Colleges and secondary schools will be provided access to electronic libraries via the Internet.

10.5.4 Multi-media application and software development competition, and education of Information Technology will become necessary input for accelerating education development in the country.

11. LIBRARY AND DOCUMENTATION SERVICES

11. LIBRARY AND DOCUMENTATION SERVICES

11.1 Conceptual Framework

11.1.1 The socio-economic development of the country necessitates a steady intellectual growth of people which requires among many other things, free public library service. Libraries play a vital role in overall development of education and research in the country. Education in Pakistan needs a new orientation and direction for quantitative expansion and qualitative improvement to meet the challenges of the 21st Century. This in turn depends on the support of well organized libraries at all levels from primary schools to universities. Side by side with academic libraries the establishment of an integrated network of public libraries in the country is essential to create well informed citizens worthy of serving society decently. The present government wishes to create a literate society and to provide sustained motivation for neo-literates to continue their education. Thus due importance will be given to the provision and progressive improvement of library facilities and services in order to contribute effectively to national development.

11.1.2 The future belongs to countries whose people make the most productive use of information, knowledge and technology. Knowledge has become the most important economic resource. Knowledge and information will be the engines to drive the economy in the 21st Century. Library forms a key pillar in the overall infrastructure to expand our nation's capacity to learn. It has a crucial role in supporting the entire spectrum of our population in life long process of acquiring new knowledge and skills. Libraries not only provide points of access to the materials available, but they also cater to variegated needs of the people and the specific needs of different economic sectors. Besides, its function as a gateway and repository of knowledge and information, library also functions as a nuclei of culture and heritage. Through the many programmes and services offered, library can indeed provide the social setting which allows for learning through interactions and hence opportunities to gather knowledge through informal channels. The ultimate aim of library should be to enable people to read more and absorb knowledge.

11.1.3 **Comparative Analysis.** According to a survey conducted during 1990 in Pakistan, there are about 1430 libraries, out of which 140 are academic/university libraries (with total No. of 452 service points) having almost 3,900,000 volumes (i.e. more than a fifth of all the books in Pakistani libraries), whereas 680 colleges hold more than 3,640,000 volumes. Likewise 280 public libraries hold the country's third largest collection of 215,000 volumes. Similarly 330 special libraries hold some 2,500,000 volumes. However, there are only 481 school libraries, out of 1,50, 000 schools, with 980 ,800 volumes in all and only 30 professional librarians are placed in these poor school libraries. According to another estimate, there is a total number of 1200 libraries in Pakistan out of which about 50% belong to educational institutions 25% are attached to specialized institutions whereas 25% libraries are of other types. The total number of existing libraries is grossly inadequate for a country like Pakistan having population of over

14 million and as such do not facilitate easier access to knowledge.

11.1.4 As compared with the developed and developing world with our existing number of libraries and their resources, it again paints a very dismal picture of our holdings. For example, in the USA, there are more than 31,254 libraries including 10,000 special libraries. The Library of Congress (USA) has more than 9,00,00,000 items in its collection. According to 1990 statistics, Israel has 3419 libraries for its population of 50,00,000 people. Tanzania with the lowest GNP (i.e. $ 70) has currently 3200 rural libraries whereas our National Library of Pakistan has a total collection of around 1,25,000 volumes. The reading habit is declining sharply in Pakistan due to non-existence of proper library facilities. The total collection in 1430 libraries comes to 1,50,00,000 books which shows 0.1 book per reader in Pakistan whereas, 58 books are available for every citizen in Japan. There are 141 dailies being published in different languages in the country with the total circulation of 30,64,172. Thus one newspaper is read by 17 readers in Pakistan. The number of libraries, and strength of their collections is one of the indicators to assess the socioeconomic development level of the country. No literacy campaign or drive can be successful without establishing the proper network of libraries throughout the country. Thus, special efforts shall be initiated to establish the desired network of libraries.

11.1.5 In view of the increasing need of timely access to relevant information in education research and training, a well-equipped and full-fledged automated "National Documentation Centre in Education" is essential to supplement the educational research and training activities. Documentation Centres to cater information needs of other sectors of national development shall also be established. At present research literature produced by various academic and research organizations is scattered and not easily accessible for research activities and does not, therefore, cater to the information needs of researchers, teachers, students, educationists under one roof.

11.1.6 The category/area wise status of the libraries in the country is as follows:-

i **School Libraries.** School is the base for formal education. It should be given prime importance to infuse quality education. At school level, due importance has not been given to libraries for enhancing the standard of education. About 80% schools are without any library facility in the country. According to the survey conducted in 1990, there are only 481 school libraries out of 1, 50,000 schools with the meager collection of 9,80,800 volumes. In most of these schools, libraries are kept beyond the reach of students due to non-availability of professional staff, proper space and environment. At present only 30 school libraries are being run by qualified librarians.

ii **College Libraries**. The college libraries which are the largest group of libraries in the country have also been facing the problems of poor services, out-dated collection of reading materials, financial constraints and inadequate professional staff. There are colleges and institutions which have enrolment of thousands of

students and one librarian is managing the library services who can not organize the collection properly and is unable to provide timely services to all students and teachers single handedly. In view of increasing student's enrolments and teaching staff, reasonable number of professional staff is needed to be appointed which will definitely improve the standards of library services and quality of education and teaching. Presently, 680 colleges have libraries, holding more the 36,40,000 volumes. Their collection ranges from 500 to 2,00,000 books out of which 60% has become out-dated particularly in sciences, medicine and technology disciplines.

iii **University Libraries.** There are 140 libraries in Universities and their affiliated institutions with a total number of 452 service points, having almost 39,00,000 volumes which is more than a fifth of all books in libraries of Pakistan. These libraries are comparatively in a better position, but still lack the latest materials, equipment, viable financial resources, access to information technology electronic media, etc. The University and its affiliated institutes are the higher seats of learning. A well-established library with up-to-date collection, suitable for study and research is a pre-requisite for modern quality higher education. In Pakistan, academic libraries are unfortunately in bad shape. For the last many years, the university libraries are not getting appropriate funds to purchase the latest books and research journals. Sufficient funds will be provided on regular basis for the purchase of books, research journals, computers, installation of INTERNET facilities and linking of university libraries through electronic media.

iv **Special Libraries.** 330 special or institutional libraries are set up at different level in various R&D organizations and S&T institutions to meet the specific organizational information needs. These hold some 25,00,000 volumes but they are facing the problems of shortage of resources, equipment, proper facilities, budget, expertise, and sustainability in maintaining the standard of services. Efforts shall be made to improve their condition.

v **Public Libraries**. Our public libraries, with a few exceptions, are in a very deplorable condition. These are just reading-rooms of newspapers and few magazines. Non-formal or informal education of people is of utmost importance and necessitates serious attention of the government. If public libraries are well-equipped, properly organized and managed by professionals, there will be a great refinement and improvement in the social, cultural, political and religious behaviour of the people. Presently, there are more than 280 public libraries, mostly located in the urban areas of the country. Public libraries not only can play a significant role in promoting literacy through self-education but also provide educational, informational and recreational materials for the community as well as individuals. In the successive policies and plans, this important factor

could not invite the attention of the policy-makers and planners. It is, therefore, imperative to strengthen the information resources and increase their number by setting up new public libraries through legislative and other means.

vi **Rural Libraries.** Out rural population constitutes 65% of the country whereas proper library services are not available to this community. Apart from the significant role of the rural library in promoting the reading habits, the library services to the community have traditionally been broad based and multi-dimensional as compared to other agencies serving the community. These could be utilized to create awareness in the community for solving problems and concerns regarding their educational, cultural, informational and recreational programmes and activities by arranging exhibitions, organizing book fairs, inviting speakers, holding seminars/meetings, celebrating special occasions/days, arranging film-shows, and arranging story-hours for children and women-folk, etc. In addition, electronic developments are currently available that can also be used to bring library services to the door-step of people. Consequently, library can play a deeper role towards national integration; promoting local, regional, national and international understanding; modifying the behaviour of groups and classes; and , eliminating conflicts and confrontations in a community by providing varied opportunities for positive and constructive activities to the citizens. Thus, a library can become a very important link in local as well as national cohesion, unity and discipline. The fact that not all the small cities, towns and villages have libraries, points to gross neglect of the past. The Ministry of Local Government will be involved for improving Union Council libraries in rural areas, This area calls for active participation of the local populace who if properly motivated will be only too willing to financially contribute. In view of the limited resources the library services can not be extended simultaneously to the remote areas and scattered rural population in the country. It is, thus, imperative to introduce the mobile library service for every 50,000 population living in far flung areas. This experiment was practiced successfully in USA and some African countries during early part of this Century. The mobile library service has already been started in Lahore Division in 1990 which visits 7 to 8 places in the sub-urban areas of Lahore.

vii **National Library of Pakistan:** The National Library of Pakistan has been established after 45 years of Independence. It was inaugurated in August, 1993. since then more than 125,000 volumes including 525 manuscripts have been collected. An operational library software is in the final stages of development. At present, the Library is inadequately staffed and funding is poor. For sustained development of its growth, programmes, policies, and to function as the leading library of the nation necessary legislative support is needed.

11.2 Objectives of Library and Documentation Services:

11.2.1 Develop reading habits among masses and provide information and research opportunities through libraries which will, inturn, re-enforce literacy movement as libraries are considered part and parcel of educational system and agent of social and economic change.

11.2.2 Strengthen the existing educational system quantitatively and qualitatively by improving the services and access to the latest information sources, both printed and electronic media.

11.2.3 Establish the multimedia libraries and information resource centres at grass root levels i.e. Union Council which will encourage and attract the youths and adults to self-learning and similar constructive activities.

11.2.4 Promote national integration and tolerance among various classes, at regional as well as national level through knowledge based activities. This will also help to discourage sectarianism in the country.

11.2.5 Inculcate reading habits among the people by providing ample opportunities through libraries with better understanding of the democratic values and socialization.

11.3 Policy Provisions:

11.3.1 Promote literacy by providing opportunities for self-education and inculcating reading habit among the masses. A well-integrated network of public libraries will be established at grass-root level with the financial support of local bodies in the country.

11.3.2 Equip the School, College and University libraries with the latest readingmaterials/services. One INTERNET connection with computer will be given to each library for easy access to electronic libraries.

11.3.3 Encourage the use of latest information technology, computers, databases, etc. in special libraries.

11.3.4 Introduce Mobile Library Service for semi-urban and remote rural areas for catering to information needs of deprived people.

11.3.5 More funds will be allocated for extensive use of library facilities.

11.3.6 Prepare the library standards for different types of libraries i.e. Public Libraries, Special Libraries, University Libraries, School and College Libraries to ensure the provision of better and effective library services.

11.4 Physical Targets:

S.No.	Nature of Libraries	No. of Libraries (To be established/strengthened)
1.	**School Libraries** (Only 20% schools have libraries which are at best modest)	**Total: (i + ii + iii)** **15,25,000** i) Primary: 1,50,000 ii) Middle: 14,000 iii) Secondary: 10,000
2.	**College Libraries** (Art + Science + Professional Colleges)	975
3.	**Special/Departmental Libraries**	1500
4.	**Public/Rural Libraries** (At Union Council Level)	**Total Union Councils (i-iv)** **3975** i) Punjab: 2393 ii) Sindh: 612 iii) NWFP: 655 iv) Balochistan: 315
5.	**Mobile Libraries** (One each for 50,000 population)	2000
6.	Establishment of **"National Documentation Centre in Education".**	**1 (Library) + (Doc. Centre) = 2** (Coordinate research activities to provide computerized services and educational Documentation across the country, catering information needs to educationists, researchers, teachers, students, etc. under one roof.)

11.5 Implementation Strategy:

11.5.1 National Documentation Centre in Education, with the core collection of 50,000 research reports, will be established.

11.5.2. University libraries, and major research libraries will be linked with the National Library of Pakistan through INTERNET to share national information sources.
11.5.3 Book Banks will be established in academic libraries for free textbook service to the needy students.

11.5.4 A Comprehensive library and Information Services Policy through an Act will be introduced in the country and service conditions of library professionals and staff will be further improved in line with other professionals working in different fields/disciplines and to provide adequate financial requirements and legal support to the development of libraries in the country.

11.5.5 In order to promote the library movement in the country, it will be necessary to establish properly trained and professionally competent cadres of librarians, both for educational and public libraries. Federal and Provincial Governments will take necessary steps to create proper service structure for professional librarians.

11.5.6 To give proper status to the National Library of Pakistan a National Library Act will be enacted.

11.5.7 Scholarships for foreign as well as inland study and training in Library and Information Science will be awarded as is done in the other disciplines/subjects.

11.5.8 Endowment fund for the development of libraries in collaboration with donor agencies will be created.

11.5.9 Library period would be encourged in the school time table.

11.5.10 Pakistan Library Association (PLA) will be involved in formulation of library standards, legislation, and training and its annual grant-in-aid will be increased reasonably.

11.5.11 Five Awards will be instituted for the best librarian as well as the best library of the year.

12. PHYSICAL EDUCATION AND CHARACTER BUILDING

12. PHYSICAL EDUCATION AND CHARACTER BUILDING

12.1 Conceptual Framework

12.1.1 The modern concept of education stresses upon all-round development of the individual. Physical education with special emphasis on sports and games is an integral part of education, concerned with health and physical fitness. It also contributes alongwith other branches of eduction to mental, emotional and social development. Thus, physical education is important for the development of personality.

12.1.2 Majority of the physical education teachers in educational institutions including schools, colleges and universities are graduates of various colleges of Physical Education in Pakistan. While they are supposed to perform field assignments, their entire education is theoretical with very little field-work as integral part of their training system.

12.1.3 There is no concept of specialization in the training of Physical Education teachers. Specialization in one or two disciplines is essential. Programmeming, which is the most vital aspect of physical education, is not given any priority or attention. Thus teacher training programmes in physical education lack job-oriented training and quality. The teachers therefore, are not equipped to handle the nature of their job or to run programmes involving large student community. Added to this complex problem is the intake of the aspiring physical education students. At present there is no compulsion that students enrolled on the physical education courses at graduate level should have studied Physical Education in their higher secondary school. Consequently, substantial percentage of Physical Education graduates neither have the sporting interest nor the relevant background.

12.1.4 Lack of avenues in career is also a contributing factor to the average or below average quality of physical education teachers. Their role in educational institutions is down-graded to that of a general duty person who is asked to do various chores. Though, at least on paper, the Physical Education teachers have equivalent educational background, career openings for them are very limited. With lifetime service in the same grade, the service structure is not incentive-oriented. This needs to be radically altered.

12.1.5 Physical education is compulsory in educational institutions with a minimum of three periods of 40 to 45 minutes per week. These periods are never properly utilized simply because the person incharge has no knowledge of scientific programmeming. The only sporting activity is the annual sports function or a P.T. show for visiting V.I.Ps. This does not serve any purpose. Regular sporting programmes are generally missing from the overall system. Non-availability of playing facilities in schools further adds to this difficulty.

12.1.6 It was felt that simple regulated running programmes of different distances for different age groups would greatly improve the physical fitness of the students. One of the major

problems in educational institutions is the absence of regular sporting programmes. Additionally, whatever programmes do exist are not relevant in the context of national priority.

12.1.7 Lack of infrastructure, like playgrounds fields, gymnasiums and sports hostels is considered to be a major inhibiting factor. Each province must have a minimum of modest educational sport complexes with outdoor stadiums, indoor gymnasiums and sports hostel. These sports complexes in each province would be made available to all the educational institutions by rotation. In the second phase rural areas would also get this facility beginning at the tehsil level. This pattern has been adopted with great success to control urban juvenile delinquency all over the world. These sports complexes could become the venues of regular summer and winter training programmes for talented athletes on the pattern of similar training programmes organised at the national coaching centres during the early sixties with tremendous success.

12.1.8 The cost of equipments has become prohibitive. Eighty percent of the student community in Pakistan cannot afford to buy hockey sticks, cricket bats, footballs, volleyballs or other items of athletic equipments from their own resources. It is, therefore, essential that a separate provision of standard equipments be made annually and placed at the disposal of the institution for student community usage only.

12.1.9 Incentive is the key word in all modern planning concepts. A large number of schemes in this regard such as the "most outstanding young sportsman/sportsgirl of the year award" to be given personally by the Prime Minister; long-duration foreign training for outstanding athletes, girls and boys; and position of honour in school, are some of the realistic possibilities.

12.1.10 Character building means raising decent future generation, in a society dominated by vulgarity, greed, selfishness and violation of fundamental moral values. There are three main components of any character building process viz: family which includes parents, brothers and sisters, educational institutions and society as a whole. Without integrating the efforts of the three components, success is not possible. The values that we have built in our society are constantly being challenged. Improper child rearing has now become a public health problem. The option is between bullying reformation or rational approach with the sole object of conveying a message to millions of children which should not only register in their minds and hearts but should also create realistic voluntary acceptance of those ideals. Parents have the most crucial role to play because over indulgence of parents can literally ruin the lives of children. Naturally, inherent qualities of kindness and sympathy in young children can only flourish with the active guidance of parents.

12.1.11 The manifest vulgarities of liberal society find young, immature minds very easy to attract and a character education movement in a society where a large number of people are uneducated is not easy. Promoting basic decency requires a stern federal role with specific strategy for addressing moral and civil virtues. Introducing large scale family club system with

avenues of family recreation, collective sporting activity could be a start, though modest . Once a young student understands that institutional loyalty and submission of individual to the larger community is in the best interest of everybody, a healthy bondage would automatically develop. Love and security of belonging are two important virtues of character building. Based on experience once young children begin to understand what makes the other persons feel better or worse, what rule should be obeyed and who makes decisions, a lot of mist prevailing in our society would clear away.

12.2 Objectives

The general objectives of the New Education Policy for Physical Education and Character Building would be:

12.2.1 To promote sports and games from the grass-root to all tiers of the education system in the country.

12.2.2 To develop infrastructure for linking the educational institutions with the provincial and Federal Sports Boards/Departments.

12.2.3 To inculcate the spirit of sportsmanship and other higher values relating to character-building in the youth.

12.3 Policy Provisions

12.3.1 Special syllabus about character building will be made an integral part of all the teacher's training institutions in Pakistan.

12.3.2 Two periods a week will be given, especially in schools upto matriculation, to explain the advantages of self-discipline, moral values and honesty in life.

12.3.3 Competitions will be arranged where groups from different schools would compete in programmes aimed at bringing out the finest qualities of human character.

12.3.4 In schools, starting from kindergarten, self-discipline and moral values of students would be enhanced through a conscious programme. Students excelling in this area would be given special school badges developed for this purpose. Such programmes of character education should be woven into the basic fabric of the school education and reflected in the daily school routine.

12.3.5 Schools would develop outdoor programmes in which groups will be made to live outside their normal environment to develop awareness of the values that improve the structure of a society. These outdoor programmes can include adventures, sporting activities and collective mental toughness exercises.

12.3.6 Television, without making it too obvious, will telecast programmes especially in the morning hours during holidays emphasizing Islamic values of honesty and morality, etc.

12.3.7 Parents-teachers meetings in schools will be institutionalized on scientific lines instead of making them a social get-together.

12.3.8 The Head of an educational institution where indiscipline, thefts and anti-social activities take place would be penalized. Conversely, the Head whose institution shows greater moral strength of students would be rewarded. A simple yard-stick to measure such qualities would be developed.

12.3.9 Retired senior officials would be involved in the programmes to create awareness in society in their respective areas regarding the obligation towards children and the future of the country. These senior citizens would be extended proper cooperation by educational institutions and the parents.

12.3.10 The institution of family clubs with elementary recreational and socializing facilities would be introduced by the government on a massive scale. Such intermingling will develop respect for each others' rights and lead to collective improvement of the moral fabric of society.

12.4 Physical Targets

12.4.1 Infrastructure

Because of the acute shortage of infrastructure in educational institutions, the following minimum infrastructure would be created within a period of three years in Quetta, Karachi, Lahore, Peshawar and Islamabad.

a Multi-purpose indoor gymnasium with seating capacity for 500 people;

b Multi-purpose sports stadium with seating capacity for 3000 people and a six-lane synthetic track, football ground, out-door basketball courts and indoor squash courts, a table tennis hall; and,

c Dormitories for 200 sportsmen and sports girls (One each in Quetta, Karachi, Lahore, Peshawar and Islamabad).

This infrastructure would be used by the surrounding educational institutions on a rotation basis and be made available to every school without distinction or patronage.

12.4.2 Financing

50% of the total cost of the above proposed infrastructure would be borne by the respective Boards of Intermediate & Secondary Education in Quetta, Karachi, Lahore, Peshawar

and Islamabad from their available financial reserves, including sports funds while the balance of 50% would be provided by the Provincial Governments, concerned, and in case of Islamabad by the Federal Government.

12.4.3 Sports Equipment

Sports equipment must be provided by educational institutions for teams and collective sporting activity. The equipment would be retained by the educational institutions and only given when the activity takes place. Initially, a sum of RS. 20.00 million would be earmarked for the purchase of sports equipment.

12.5 Implementation Strategy

12.5.1 Scientific sports programmeming and specialisation in at least two disciplines will be made an integral part of the syllabus of all those institutions which produce Physical Education teachers of various types and colleges of physical education all over the country.

12.5.2 Preferably those students will be enrolled in Physical Education colleges who have a decent sports background and have studied Physical Education in their higher secondary school system.

12.5.3 At least one third of the total time frame of the study period in colleges of Physical Education or universities, etc. will be earmarked for practical training. This will compulsorily include a stint with National Sports Federations during national events to provide uptodate know-how in planning and execution of sporting events.

12.5.4 Mobile visual aid vans will be provided to conduct refresher courses in rural areas for teachers of Physical Education. This would be a continuous process and closely monitored.

12.5.5 In order to attract dedicated people who are genuinely interested in sports and physical education, career openings will be made at par with the main teaching cadre.

12.5.6 In the absence of playing fields in educational institutions, simple running programmes detailed below shall be regularly executed:-

	Age Group	Distance
a	4 to 8 years	½ km
b	9 to 12 years	1 km
c	13 to 18 years	2 km
d	19 to 22 years	5 km

Medical test of every student must precede participation in these running programmes.

12.5.7 Inter-school sports competitions in various disciplines including indigenous games would be regularly held at tehsil, district and divisional levels culminating in a 7-day youth sports festival inviting champion teams from all over Pakistan. This would be followed by a selection on an all Pakistan basis and the selected teams would be sent abroad for competition/training.

12.5.8 At the school, college and university level, separate "Most Outstanding Sportsman/Sportsgirl of the Year Award" will be introduced with fair cash incentives. Preferably, these awards would be given personally by the President or Prime Minister of Pakistan.

12.5.9 Regular summer camps in various sports would be held during the summer vacation especially in hockey, football, athletics, boxing, basket-ball, volleyball tennis, badminton and wrestling. The summer camps would be supervised by qualified coaches, preferably from abroad, as no scientific cadre of coaches on such a large scale is available in Pakistan.

12.5.10 Coordination between the Ministry of Sports, Culture and Tourism and Ministry of Education will be strengthened as these are the two inter-connected domains and better results can be produced through the combination of sports and education.

12.5.11 Certain schools would be earmarked for specialisation in which boys who excel in certain sports would be given free admission and exemption from tuition fee.

12.5.12 Heads of institutions whose students produce outstanding sporting results would be rewarded.

12.5.13 In order to streamline sport activities in educational institutions all over Pakistan and to draw a realistic programme, a steering Committee comprising representatives from Education and Sports and Culture Ministeries/Departments at Federal and Provincial levels, President Pakistan Olympics Committee, Sports Board etc, shall be constituted.

12.5.14 Every year adequate funds would be set aside for sending teams abroad and coaches for foreign training. A similar budget provision would also be made for entertaining foreign student sports teams both in male and female sectors.

13. PRIVATE SECTOR IN EDUCATION

13. PRIVATE SECTOR IN EDUCATION

13.1 Conceptual Framework

13.1.1 After the partition of the sub-continent in 1947, physical and human resources in Pakistan were scarce posing critical problems for the newly independent democratic society. Thus, radical reforms to develop physical and human resources were introduced for the socioeconomic uplift of the nation. Education reforms revolved around the following three critical areas:

i. Internal transformation of the system to make it more relevant to the life, needs and aspirations of the newly created Islamic State;

ii. Qualitative improvement of education to respond to an expanding market economy;

iii. Quantitative expansion, based on the manpower needs, but of course with a direction on equalization of educational opportunities;

13.1.2 These reforms were a colossal task which could be accomplished if the large amount of financial, manpower and material resources were made available to the government. The government alone was not in position to provide adequate financial and physical resources to undertake the restructuring of the education system and also its expansion to meet the demand of the society. Realizing the shortcomings of the government and strong belief among the policy makers that the people as beneficiaries will have to share this burden of education expansion individually or collectively, reforms were introduced to generate resources from other sources such as new taxation, fee, donation. The system of grant-in-aid introduced in the prepartition period continued till 1972 for attracting the private sector to participate in provision of educational facilities to their citizens who were clamouring for more and better education for the children. Since expenditure on education is now being considered as an investment rather than consumption, there is a strong feeling among the public that private sector must and should participate actively to supplement the resources of the government for the development of human resources.

13.1.3 Unfortunately, the relationship of the State to private entrepreneurs in Pakistan has been paternalistic. The private sector lacks the dynamism to act as a cooperative partner in the policy formulation, and often prefers to rely on the permanent crutches of State subsidies for their survival. A clear need exists for a more active private sector in Pakistan. There are already signs that the private sector can help to remove some of the bottlenecks hindering to the development of human resources. Private entrepreneurs have done well in providing high quality education to high income groups in urban areas, but there is an urgent need to extend these facilities to the poor and disadvantaged population. The participation of the private sector, NGOs and grassroot movement in efforts to raise the level of human development in Pakistan is vital -- and the pursuit of these common goals is too important to be left to the State alone.

13.1.4 Recognizing that the Government alone cannot achieve the Policy objectives, it is imperative to seek volitional involvement of the private sector in the expansion of education. The National Education Commission 1959, Education Policy 1979, Sixth and Seventh Five Year Plans, and VISION 2010 strongly advocated the involvement of the private sector in the quantitative and qualitative improvement of education at all levels.

13.2 Present Status of Private Sector's Involvement in Education

13.2.1 Prior to 1972, privately-managed educational institutions constituted a sizeable portion of the total educational system. Most of these institutions operated at the school and college levels. Such institutions were administered and managed by voluntary organizations, and, apart from generating their own funds through fees, attached property and donations, the institutions also received grant-in-aid from the government. Some private educational institutions earned high reputation for the academic standards they maintained and for the quality of their public instruction. However, in a vast majority, the educational conditions were far from satisfactory, the service conditions were poor, the staff salaries were low, and job security was non-existent. In this situation, when the private educational institutions were pursuing a faulty educational process, and the teachers were dissatisfied, the government in 1972 decided to take over all the private managed educational institutions. This was done through Martial Law Regulation No.118 which proclaimed that "as from first day of September, 1972, all privately managed colleges together with all property attached to them shall vest in the Government". This brought to an end the long era of privately managed institutions. As a result 19,432 educational institutions were nationalized. These included 18,926 schools, 346 madrassas, 155 colleges and 5 technical institutions. This was accompanied by the induction of 25,000 teachers into government service.

13.2.2 What was done in 1972, has stabilized. However, as a result of nationalization, the government expenditure on education increased by several orders of magnitude, and nationalization thus turned out to be a disincentive thereby closing the doors for any further participation of the community in educational development.

13.2.3 The National Policy of 1979, reviewed the consequences of nationalization and came to the conclusion that in view of poor participation rates at all levels of education, the Government alone could not carry the burden of the whole educational process. It was, therefore, considered necessary to encourage once again the participation of the community in educational development. To do so, the following policy measures were adopted:

i. Private enterprise will be encouraged to open educational institutions particularly in rural areas.

ii. Permission to setup educational institutions will be granted by the Ministry of Education or the respective Provincial Education Departments. Criteria for according permission to setup new educational institutions and their recognition will be

developed to ensure academic standards and provision of qualified staff and their terms and conditions of service and adequate physical facilities.

iii. The existing legislation on nationalization of privately-managed educational institutions will be suitably amended to allow opening of private educational institutions and to ensure that such institutions setup with the permission of government will not be nationalized in future. Regular instructional supervision of these institutions will be undertaken by the Education Departments and relevant statutory bodies.

iv. Income-tax relief will be allowed to individuals and organizations for donations to these schools.

13.2.4 In pursuance of this policy, the Punjab Private Educational Institutions (Promotion and Regulation), an Ordinance was passed in 1984 (No.II of 1984). Similar Ordinances were adopted by the Government of NWFP and Sindh. The Ordinances provide for the registration of all private institutions with Registration Authority to be established, the constitution of a Managing Body for each institution, and spells out the conditions for registration. Under these conditions, the Government approval is considered mandatory for the adoption of fee structure by each private institution.

13.2.5 As a consequence of the promulgation of these Ordinances in Provinces, a second wave of community participation in education had been energized. It is estimated that about 10,000 private educational institutions at all levels with approximately 3 million students are functioning in the country. Most of these institutions are "English medium" schools and impart education from playgroup to postgraduate level. Some schools have been established on community basis, while the others are owned by individuals. The concentration of these schools is in urban areas. Heavy fees are charged by these schools. Neither in the past, nor in the recent current of privatization, investment was made by the private sector in higher education. However, an interesting feature of the recent activity is the establishment of five universities, viz; The Agha Khan Health Sciences University, Karachi; Hamdard University, Karachi; Sir Syed University of Engineering and Technology, Karachi; Baqai University, Karachi; and the University of Management Sciences at Lahore.

13.3 Issues in Private Managed Institutions

13.1.1 The revival of privatization is considered a useful activity for the much- needed expansion of school education. Generally, the participation of the community in educational development is viewed favourably as "burden sharing" with the Government, since development in the private sector comes as an additionality to the Government development plans. Government, at present, is not providing any support fund to these institutions. However, mostly, there has been a mushroom emergence of these institutions. The regulatory control over

these institutions, though available in the Provinces, has failed to settle a number of issues. Though private sector role in the expansion of educational facilities is generally welcomed, there are a number of issues which need to be addressed:

i. The issue of fees has been the subject of severe criticism by the society. These institutions, whatever their medium of instruction, are not developing as institutions of equal opportunity. Because of the high fees charged, the access of poor talented students to these institutions remains evasive. There is nothing in the Provincial Ordinance which may prevent the private schools from charging high fees. It is also important to consider that in the absence of grant-in-aid from the Government, fees remain the only major source of income. Moreover, it is argued that most of the institutions are being established with a profit motive.

ii. Much of the attraction of those schools, at the primary and the post-primary level resides in the important feature that these are "English Medium" schools. As a policy measure, the Urdu medium was adopted uniformly for all schools in 1979. It was hoped that the Matriculation Examination of 1989 will be held on the basis of Urdu as medium of instruction. Unfortunately, a mid-stream turn about took place and when the Urdu medium batch reached class-VIII the uniformity was broken, and permission was granted for the use of English as medium of instruction for science subject and mathematics. The appearance of private "English Medium" schools in the private sector, has perhaps, partly contributed to this vaccilating attitude. There was no bar on the private schools preparing students for 'O' and 'A' Level Examinations through English Medium. However, their lobby which affected our own scheme of studies, merits a debate on the subject.

iii. It is argued that because of immense resource requirement, it is difficult for the Government to achieve the objective of universalization of primary education. Accordingly, the opening of primary schools in the private sector is considered additionality to the effort of the Government towards universalization. This is not a legitimate argument. The participation rates being already higher in urban settlements, it is in the rural areas that more schools are needed. The type of clientele going to these schools would any way participate in education. Thus, their role in universalization remains only marginal. Further , because of the use of English as medium of instruction, and high fee structure, these institutions are better suited to serve the requirement of elite population. Such a development is contradicted if effort is to be directed towards the development of an egalitarian society.

iv. As in the past, the revival of the system of grants-in aid by the Government should be considered. This would be an incentive for the private sector to join in the Government effort. The Punjab Government, for example, has set up a foundation with an initial endowment of Rs.250 million. These funds are used for providing suitable support and encouragement to such institutions as have been established on

no-profit basis. Other incentives include (a) facilitation of registration procedures (b) sharing of expenses for laboratory equipment and teaching aids (c) exemption from taxes and (d) recognition of excellent institutions for national awards.

v. Curriculum and the scheme of studies are prepared by the Ministry of Education in order to ensure the maintenance of standards and to keep a watch so that materials repugnant to the ideology of Pakistan are not included in the texts produced. There are complaints that some private institutions are prescribing books which contain unsatisfactory materials. The private institutions therefore should also be controlled through the application of the Curriculum Act.

13.4 Policy Objectives

The objectives to be achieved are listed as follows;

13.4.1 Strengthening the delivery of Education Services through greater NGO and Private Sector involvement.

13.4.2 Accelerating the human resource development of the country through partnership among NGO, Private and Government Sectors.

13.4.3 Restructuring and re-organising the National and Provincial Education Foundations in their targetting and resource mechanism in support of low-fee private sector and NGO initative in needy areas.

13.5 Policy Provisions/Implementation Strategy

13.5.1 There shall be a regulatory body at the National level to regulate activities and smooth functioning of privately-managed schools through proper rules and regulations to be framed by the regulating body. Similar bodies shall be established in the Provinces.

13.5.2 A reasonable tax rebate shall be granted on the expenditure incurred on the setting up of educational facilities by the private sector.

13.5.3 Grants -in-aid for specific purposes shall be provided to private institutions; setting up of private technical institutions shall be encouraged.

13.5.4 Matching grants shall be provided for establishing educational institutions by the private sector in the rural areas or poor urban areas through Education Foundations.

13.5.5 Law pertaining to setting up degree-awarding higher education institutions and specialised institutes, shall be liberalised. The institutions so established will be placed under

the University Grants Commission for regulating academic programmes and award of degrees.

13.5.6 Existing institutions of higher learning shall be allowed to negotiate for financial assistance with donor agencies in collaboration with the Ministry of Education.

13.5.7 Educational institutions to be set up in the private sector will be provided (a) plots in residential schemes on reserve prices, and (b) rebate on income tax, like industry.

13.5.8 Companies, with a paid-up capital of Rs.100 million or more, shall be required under the law to establish and run educational institutions upto secondary level with funds provided by them.

13.5.9 Liberal loan facility shall be provided to private educational institutions by financial institutions.

13.5.10 The private sector institutions will be allowed to collaborate with international institutions of repute for achieving common academic objectives.

13.5.11 Schools running on non-profit no-gain basis shall be exempted from all taxes.

13.5.12 Privately-managed institutions shall be bound under law to admit free from any charge at least 10% of the intelligent students belonging to low income groups.

13.5.13 Curriculum used by private institutions must conform to the principles laid down in the Curriculum Act.

13.5.14 The fee structure shall be developed in consultation with the Government.

13.5.15 Government Admission Policy shall be enforced in Private Institutions.

13.5.16 Selected denationalization of Public Primary & Secondary Institutions.

14. INNOVATIVE PROGRAMMES

14. INNOVATIVE PROGRAMMES

14.1 Conceptual Framework

14.1.1 Various levels of Education have been discussed in the previous chapters and a number of Policy provisions indicated. This chapter specifically describes some programmes which are innovative in nature and have been repeatedly endorsed by a great majority of persons who tendered suggestions for the formulation of Policy recommendations. These programmes relate to important facets of education and are expected to cut across areas like equity, character building, self reliance and improvement in the quality of educational standards. The innovative programmes are:-

i Incentive scheme for Primary School Teachers.
ii Education Card.
iii National Education Testing Service.
iv Utilization of Pakistani Talent Abroad.

14.2 Incentive Scheme for Primary School Teachers

14.2.1 Empirical studies have shown that primary education has the highest social and economic return as compared to secondary and higher level of education. Every government has tried within its resources to expand primary education through establishment of primary schools, but its qualitative improvement which is vital for social and economic progress of the country has, by and large, been ignored. The neglect of qualitative aspect is the main cause of apathy among students leading to high drop-out and repetition resulting into wastage of scarce resources.

14.2.2 There is a widespread opinion that the standard of education is falling. A variety of schemes and models have also been introduced in the past under the label of educational reforms but without much success. The reason of these repeated failures was that "the Primary School Teacher" "the core element of system of education" - was not fully involved in the improvement of quality education. At this historic juncture, on the threshold of the 21st Century, it is imperative to gear up the latent potential of primary school teachers and channelize their energies in proper direction for national development. Besides being low paid, the status of primary school teachers is not duly recognized and acknowledged in the society.

14.2.3 As primary education is considered the foundation stone of education system of a country, in the same way teacher is the focal point in the sphere of teaching-learning process. It is the nucleus around which the whole system of education revolves. No education programme can achieve its targets unless backed by devoted and dedicated teachers.

14.2.4 The government has accorded high priority to quality education. It has also realized the importance of the teachers who play pivotal role in promoting and expanding education in

the country. To recognize and acknowledge their meritorious services and also to encourage them, an incentive scheme for Primary School Teachers shall be launched throughout Pakistan starting from grassroot level. Under this scheme, Conference of Primary School Teachers will be organized every year at District, Division and national level, where the teachers will be awarded merit certificates and Cash prizes. They will, also, be provided a forum to discuss issues confronting the primary education in the country and suggest radical measures to overcome them. Under the scheme, Primary School Teachers from the educational institutions, both rural and urban, adjudged the best on the basis of results of class V Examination from every district/division, would be invited to attend the Primary School Teachers' Conference. This annual exercise would not only encourage the teachers, but also enable the planners and policy makers to obtain useful and practical suggestions for the improvement of primary education.

14.3 Objectives of the Scheme

14.3.1 Enhance the status/prestige of primary school teachers in the society to promote their confidence and motivational level.

14.3.2 Identify the training and professional needs of primary school teachers with particular reference to multigrade teaching.

14.3.3 Provide a common platform to teachers wherein the teachers could get benefit from the knowledge and experiences of each other through interaction at district/division and national level.

14.3.4 Identify and discuss the bottlenecks hampering promotion and expansion of primary education and solicit recommendations for improvement in the quality of primary education.

14.3.5 Identify defects in the instructional material which lead to learning difficulties among students.

14.3.6 Provide incentives to good teachers through healthy competition and replication.

14.4 Criteria for Selection of Teachers for Participation in the Conference(s)

14.4.1 Only those teachers shall be selected who have exhibited excellent performance in terms of earning maximum number of scholarships by their students in Class-V Examination during the academic year in their respective Tehsil/District/ Division.

14.4.2 In case, there is no scholarship examination in vogue in any province/area then, those teachers shall be nominated by the Education Department concerned who are adjudged really devoted and hardworking and have shown excellent results in Class-V Examination in their respective Tehsil/District/Division. Under the scheme, series of Conferences for Primary School

Teachers will be organized at three different levels:-

a **District level**

To provide incentives to primary school teachers working even in remote rural areas and to involve them in the process of promotion and expansion of primary education, district level conferences for Primary School Teachers will be held. Four primary school teachers/head teachers (two male and two female from urban/rural areas of each tehsil) will be invited to attend these conferences. The conferences will be organized by male District Education Officer in collaboration with female DEO in each district. The best teachers of each tehsil as per above referred criteria will be invited to participate in the conferences and deliberate on different issues and problems in the field of primary education and make suggestions for their solution. Public representatives of National/Provincial Assemblies belonging to their respective areas will preside over these conferences.

b **Divisional level**

To provide broader canvas to primary school teachers, Teachers' Conferences at Division level will also be organized at each divisional headquarter. Provincial Education Departments will be responsible for holding these Conferences. Four best teachers (two male and two female rural/urban of each district) as per above referred criteria will be invited to attend these Conferences.

c **National level**

i For a broader spectrum, National Teachers' Conference will also be organized annually at Islamabad under the auspices of Federal Ministry for Education. Four best teachers (Two male and two female from each Division) will be invited at Islamabad to participate in the deliberations of the National Conference. President/Prime Minister of Pakistan will also be invited to chair the Annual Conference of Primary School Teachers.

ii Merit certificates/cash awards will be given to the teachers. The best teacher at Tehsil level will be awarded merit certificate and cash prize of Rs.500/-, while the best teacher at district and divisional level will be awarded merit certificate plus cash prize of Rs.1000/- and Rs.1500/- respectively.

14.5 Education Card

14.5.1 Despite Islamic injunctions which make the acquisition of knowledge obligatory for the Muslims, unfortunately our educational status as a nation is miserably disappointing. Our literacy rate is approximately 39%. About 25% of our children are not enrolled in primary schools, and 50% of those who are enrolled, drop out before completing primary schools. The participation rate at middle and high school level is 46% and 31% respectively. In literacy rate, the placement of Pakistan among the Muslim world is 31 out of 35 countries and globally 134

out of 180 countries. Nothing can be more depressing for an ideological Muslim state.

14.5.2 Poverty among the masses has been identified as one of the contributing factors to this dismal state of educational scenario. Many children do not enroll themselves because their parents cannot afford the expenditure of their education. Majority are withdrawn from schools to join hands with their parents to earn living. Such children usually end up as labourers and ultimately add to illiterate unskilled labour force which in the long run neither helps the families of these children nor positively contributes to the economy.

14.5.3 Taking cognizance of this fact, an "**Education Card**" scheme will be launched. The main objectives of the scheme are:-

i Financial assistance to the deserving students who cannot afford to pay for their education.

ii Incentive for the children who have not yet been enrolled in the formal school system for economic reasons.

iii To decrease the dropout rate specially at Primary and Middle school levels.

iv To increase literacy rate in the long run.

v Reduction in unemployment through promotion of technical and vocational education.

14.5.4 The ultimate objective of the "**Education Card**" scheme is to provide financial support to all poor students to pursue their education without difference of cast, creed, or political affiliations, merely on the basis of need and capability to pursue their studies.

14.5.5 The Scheme will be applicable to all levels of education e.g. Primary to University, including professional education (Technical, Vocational, Agriculture, Medicine etc.). Children of both genders from urban and rural areas will be eligible to benefit from the scheme.

14.5.6 The estimate of cost, under the **Education Card** scheme, is based on moderate criterion to provide two sets of uniform/dress, a pair of shoes, books, stationery and fee allowance and a small stipend to meet other expenses. Per unit cost ranges from Rs.1700/- per annum at primary level to Rs.25000/- per annum for boarders of Professional colleges/Universities. Total expenditures on Education Card scheme works out to approx. Rs.4.0 billion per annum. The scheme will be administered by the **Education Card Cells** to be established at the Provincial Headquarters. The Education Card Cells shall operate through the **District Education Committees.**

14.5.7 In order to meet the expenses of "**Education Card**" Scheme a number of sources shall be tapped. Some of the potential sources include Zakat Fund, Usher Fund, Bait ul Mal, Endowments to be created by the Federal and Provincial Governments, Iqra Surcharge funds and donations from the philanthropists.

14.5.8 The underlying principle of Education card scheme is two-fold; (i) to improve the quality and accessibility to education for deserving/talented children; and (ii) to inculcate in them national spirit and patriotism. It will, therefore, be ensured that their "Self-Respect" is not injured by the feeling of being nurtured on charity. Therefore, the beneficiary of the scheme will be required to repay part of their stipend money in easy installments after they are gainfully employed.

14.6 National Education Testing Service

14.6.1 In Education Policy 1992, Educational Testing Service was conceived for entry examinations in professional colleges and Faculties of Universities. This was necessitated due to rampant malpractices that have crept into the examination system particularly at higher secondary level. Accordingly, the Ministry of Education developed the idea of National Education Testing Service (NETS). The objective is to maintain uniformity of scores among various Examination Boards through scientifically validated tests and raise the standard of education.

14.6.2 The basic work on NETS started in 1993. Initially, NETS has been located in the Institute of Business Administration (IBA), Karachi as the private sector did not come forward to shoulder the responsibility.

14.6.3 NETS has developed test items in the subjects of Physics, Chemistry, Math, Biology and English at Higher Secondary level. The number of such items is 4500. These have been prepared by experts and are curriculum-based which is being taught at present and encompass knowledge, comprehension and application of the subjects. These tests have been tried out at post F.Sc. level in Karachi and Islamabad. The validity is of the order of 90.95%.

14.6.4 The draft legislation for the establishment of NETS has been prepared and got vetted by the Law Division. Approval of Provincial Assemblies has also been obtained. The legislation has now been tabled in the National Assembly. The National Assembly Standing Committee on Education has also recommended the bill for adoption.

14.6.5 Salient features of NETS are:

i It will come into operation from the Academic Year 1998.

ii It will be supervised by an independent Board of Governors, and shall have advisory, technical and expert Committees.

iii Failure to qualify NETS test will render a student ineligible for admission to a professional college.

iv Any person leaking information in respect of tests, item bank or examination shall be punishable with imprisonment and fine.

14.7 Utilization of Pakistani Talent Abroad

14.7.1 A large number of Pakistanis are working as Scientists and Engineers in the reputed educational and research institutions in the developed countries. These patriotic Pakistanis are eager to contribute to the development of Pakistan by contributing the long experience they have acquired abroad. They form a very valuable human resource which should be utilized by Pakistan for national development. The UNDP has initiated a programme through which expatriate Pakistanis visit Pakistan and work in various institutions. However, due to limited scope of the scheme, the impact is very small.

14.7.2 Considering the fact that Pakistani Engineers and Scientists hold key positions in major Western Universities and R&D Institutions, a scheme shall be initiated through which such experts will be regularly invited to Pakistan for brief periods. They will be engaged in delivering lectures, conducting workshops in specific fields in the national interest and be involved in collaborative exchange programme at tertiary level.

14.7.3 Visits by such eminent scientists would not only be highly beneficial from an academic point of view but would also be cost-effective. For example, 100 experts visiting Pakistan every year in various public and private universities will cost approximately Rs.170.0 million over a period of 5 years as per following details:-

i.	Air-fares for 100 scientists per year for 5 years (500 visits over 5 year period) at Rs.60,000/- per airfare.	Rs.30.0 Million
ii.	Living expenses in Pakistan on the pattern of the UNDP Tokten programme i.e. daily allowance at an average cost of US $ 100 per day, 60 days per visit, 500 visits during the plan period.	Rs.140.0 Million
	Total:	Rs.170.0 Million
		(Over 5 year period)

14.7.4 An added advantage of launching such a scheme will be in the form of close linkages between the University where the scientist is working abroad and the host universities in Pakistan which he will be visiting. Moreover, the scientist, by using his academic connection, will also be in a position to help his students and counterpart teachers to visit foreign universities on study visits and donate equipment at no cost to the Government of Pakistan.

15. IMPLEMENTATION, MONITORING AND EVALUATION

15. IMPLEMENTATION, MONITORING AND EVALUATION

15.1 Conceptual Framework

15.1.1. The education system has been the target of experimentation in the form of a number of major reforms and policy packages during the last 50 years. None of these reforms could however, produce encouraging results. Factors responsible for inadequate performance of these policy reforms include poor implementation as the major reason. Whatever planned, was neither carried out zealously nor monitored properly.

15.1.2 Most of the development programmes and policy provisions could not be implemented since 1947, primarily due to lack of proper political commitment, lower funding and weak/non-existent implementing, monitoring and evaluation mechanism. Most of the 7 Policies/8 plans launched so far, except 1959 Policy, 1972-1977 period and the 7th Plan, have ended up as massive failures and abortive ventures depriving the nation of the social benefits and economic development which could have otherwise brought prosperity and congenial social change befitting the present day world. The low political commitment with the social sector certainly remained the key feature of poor performance and low achievement. Low funding was another cardinal reason for the chronic failures of Pakistan in achieving break-through in the social sector. The linchpin and the key factor which had receded Pakistan into the backyard of the nations at global level and made it rank 9th amongst E-9 countries, 6th amongst SAARC countries, 134th amongst 180 States of the world, is the conspicuous feebleness bordering on non-existence of the machinery earmarked for implementation of these policies. Excepting 1959 and 1992 Policies, there was no other Policy in which implementation mechanism was identified. Even, in the case of 1992 Policy infrastructure, which was created for faithful implementation was soon abolished, leading to a dismal vacuum which paralysed the spirit and achievement of the fine Document.

15.1.3 Against the backdrop of 50 years, the prime cause of failure of these policies was weak and feeble implementation mechanism, delinked with proper supportive back-stopping, inadequate personnel, poor training, low political commitment and absence of incentives. The net outcome in financial terms has been the cost-overruns, delays in accomplishment and poor return to the nation. Resultantly, the literacy rate in Pakistan, despite efforts spread over 50 years, is only 38.9%, which in the rural areas among females in some provinces is, as low as, 2%. The participation rate at primary level is only 74.8% with female participation at 63%. In rural areas the participation rate is far less than that at the national level. The profile of secondary, technical, vocational and science education is also dismal as that of basic education. In higher education, universities have remained only as teaching institutions, devoid of research and application. It is not only that number of universities in Pakistan is small, but their contribution towards the development of critical manpower which is the essential requirement for economic breakthrough, as well as, social development of the country, is also extremely limited. For research and development in the universities, the facilities are meagre which have stunted the proper intellectual growth and the consequent pay-off to the nation in tangible terms.

15.1.4 Against this backdrop, the following objectives have been identified to undertake vigorous implementation, effective monitoring and scientific evaluation so as to ensure unfailing success of the Policy.

15.2 Objectives

15.2.1 Implementation, Monitoring and Evaluation System (MES) should be re-organized and based on indicators and studies of critical nature to pursue progress on:

i Physical targets of the policy.

ii Financial inputs provided to various programmes.

iii Improvement because of policy changes in educational quality/learning achievements in various subjects at critical levels.

iv Identify factors responsible for affecting Pupils' learning, and efficiency of the system.

v Reduce the gap between gender differences.

vi Develop insight into educational contribution of the private sector.

15.3. Policy provisions

15.3.1. The following framework for implementation, monitoring and evaluation of the Policy has been proposed:-

i National Council for Educational Development to be chaired by the Prime Minister.

ii Policy implementation Committee to be chaired by the Minister for Education.

iii Provincial Council for Educational Development to be chaired by the Chief Minister of the Province.

iv Provincial Policy Implementation Committee to be chaired by Provincial Education Minister.

v District Education Authority to be chaired by the Deputy Commissioner.

vi School Management Committee at the village level.

15.3.2 **National Council for Educational Development.**

This Council will be chaired by the Prime Minister and will meet every quarter, to review implementation, monitoring and evaluation outcomes of the National Education Policy provisions. The composition of the Committee is at annexure-I. The council will have sub-committees relating to broad areas of education and will be provided with valid information/feedback by the Academy of Educational Planning and Management (AEPAM) through the Education Management Information System(EMIS). The Council will inter alia consider recommendations for formulating strategic measures and develop framework to improve the situation and ensure achievement of targets every quarter.

15.3.3 **Implementation Committee under Chairmanship of the Minister for Education**

This Committee will meet every 2nd month under the chairmanship of Education Minister and will conduct detailed policy implementation review, as the prime source to feed the National Council on Educational Development. The composition of the Committee is at annexure-I. This Committee will also be provided all the relevant information and feedback through AEPAM which will be directly linked with all the provinces as well as District headquarters. The review will inter alia include, achievement of physical targets, financial utilization, quality output etc.

15.3.4. **Provincial Council on Educational Development**

This Council will be chaired by the Chief Minister of the province and will include representatives of Planning, Finance, three prominent educationists and the Education Secretary as the member Secretary. The Committee will meet every quarter and will serve as precursor to the National Council on Educational Development. It will undertake comprehensive review of quarterly targets envisaged under the Policy including, both the physical and qualitative aspects.

15.3.5 **Provincial Policy Implementation Committee**

This Committee will be chaired by the Minister for Education, and will have senior representatives of Finance, Planning, Chairman of the Assembly Standing Committee on Education, to which Education Secretary will serve as Member Secretary. This body will meet every two months, and review in detail policy implementation, its physical targets, financial targets, quality aspect, manpower development and other critical issues. The Committee will provide feedback to the Provincial Council on Educational Development.

15.3.6. **District Education Authority**

A District Education Authority will be set up in each District throughout Pakistan. The Authority which will be chaired by the Deputy Commissioner of the District. It will meet every two months to review implementation of the Policy at the District level. It will be assisted by EMIS set-up at the District Headquarter. Those Districts, which yet do not have such facility will be provided the same in the Ist quarter after announcement of the Policy. The major field work will be undertaken by the DEOs male and female at the district level. Detailed surveys and studies could be launched by the DEOs so as to ensure flow of valid and reliable information as well as to propose realistic measures for more effective and vigorous implementation.

15.3.7 **School Management Committee at the Village Level**

At the village level the chairman of the School Management Committee, who will be an elected person will constantly review educational development in the area of his jurisdiction and ensure implementation of key policy provisions. He will also remain in constant touch with education authorities of the area and serve as key supplier of information through supervisor as well as the Assistant District Education Officer. Composition at Annexure-I.

15.3.8. Existing EMIS at Federal and Provincial levels will be strengthened to make them responsive to the need of Monitoring and Evaluation System(MES).

15.3.9. Databases of critical indicators on qualitative aspects of educational growth will be developed and maintained by AEPAM for developing sustainable indicators of progress, based on more reliable and valid data to facilitate planning, implementation and follow-up.

15.3.10 Geographical Information Systems (GIS), developed by NWFP and Balochistan will be popularized and introduced for strengthening spatial planning in other Provinces for monitoring activities.

15.3.11 To complete educational statistics on all educational institutions in the country, a legislation will be passed to require all Private Educational Institutions to supply school data to their respective EMIS centers.

15.3.12 A date, as School-Census-Day will be fixed for collecting data on one day from all over the country.

15.3.13 Data collected through Provincial EMISs and collated by National Education Management Information System (NEMIS) would be recognized as one source for planning, management, monitoring, and evaluation purposes to avoid disparities and confusion.

15.3.14 AEPAM will be strengthened and tuned up to meet the emerging demands of MES and its obligations.

15.3.15 Awareness campaigns will be launched for educational monitoring data and the role of schools and community.

ANNEX I

NATIONAL COUNCIL FOR EDUCATION DEVELOPMENT

1. Prime Minister	Chairperson
2. Minister for Education	Member / Vice Chairman
3. Minister for Finance	Member
4. Dy. Chairman P&D Div.	Member
5. All Provincial Education Ministers	Member
6. Chairman Standing Committee on Education, Senate	Member
7. Chairman, Standing Committee on Education, National Assembly	Member
8. Chief Co-ordinator Vision 2010	Member
9. Education Secretary	Member / Secretary

FEDERAL MONITORING AND EVALUATION COMMITTEE

1. Minister for Education	Chairperson
2. Finance Minister/Secretary Finance	Member
3. Dy. Chairman, P & D/Planning Secretary	Member
4. Provincial Education Ministers/Secretaries	Member
5. Three Prominent Educationists and Scientists	Member
6. Federal Education Secretary	Member
7. Head of NEMIS/D.G. AEPAM	Member / Secretary

PROVINCIAL COUNCIL ON EDUCATIONAL DEVELOPMENT

1. Chief Minister	Chairman
2. Minister for Education	Vice Chairman
3. Minister for Finance	Member
4. Chairman, P&D/ Additional Chief Secretary (Dev.)	Member
5. 3 eminent educationists	Member
6. Education Secretary	Member / Secretary

PROVINCIAL POLICY IMPLEMENTATION COMMITTEE

1. Minister for Education	Chairman
2. Minister for Finance/Secretary	Member
3. Chairman, Dev. Board on ACS Dev./Rep	Member
4. Chairman Standing Committee on Education of the Assembly	Member
5. Education Secretary	Member/Secretary

DISTRICT EDUCATION AUTHORITY

1. Deputy Commissioner	Chairperson
2. Chairman District Council	Member
3. Representative of EMIS	Member
4. Chairmen of one Town & One Municipal Committee	Member
5. Retired Educationist	Member
6. One Representative each of NGO/CBO:	Member
7. DEO (Male & Female)	Member Secretary

16. FINANCIAL OUTLAY

16. FINANCIAL OUTLAY

16.1 Financial constraints have all along been a major issue in the development of education in Pakistan. Conversely, the argument that even the meagre resources provided to education have not been adequately utilized, is also true. The vast coverage of the Education Sector, involving almost 200,000 educational institutions with about 3-4 times the number of teachers and staff spread over vast geographical areas, involves complexity of problems which are unmatched by any other Social Sector.

16.2 Inadequacy of financial resources aggravated by poor implementation machinery necessitates immediate and effective steps to salvage the twin problems of finances and management. Accordingly, the physical targets proposed in the policy have been modest and aligned, to a great extent, with the physical targets and financial expenditure envisaged in the Ninth Five Year Plan.

16.3 In brief, an amount of Rs.64.02 billion representing Rs.7.87 billion as development and Rs.56.156 billion for recurring is provided for education during 1997-98. This represents 2.2% of GDP which is very meagre compared to other Asian countries, as indicated in the following Table:

Country	%
Mongolia	8.5
Maldives	8.1
Iran	5.4
Malaysia	5.1
South Korea	4.2
Thailand	4.0
India	3.7
Sri Lanka	3.1
Nepal	2.9
Afghanistan	2.3
Bangladesh	2.3
PAKISTAN	2.2

Source:- E-9 Conference on Education for All 1997

16.4 The Policy proposes an allocation of Rs.727.194 billion for the improvement and expansion of education during the next five years. This also includes an amount of Rs.150 billion which will be generated through private sector. This augments well with the overall policy of the government to assign high priority to education and fulfill national and international commitments which the government has made with its masses and international organizations.

16.5 While allocating the overall resources, an attempt has been made to restrict the development expenditure to Rs.145 billion, out of which almost 20% is expected to be generated through the involvement of private sector. While the government is committed to create an

egalitarian society by providing 'Basic Education to all' shall continue to finance this level of education in a major way through Social Action Programme, the remaining sub-sectors like secondary education, technical and vocational education and tertiary education are expected to invite private sector financing through liberal investment policy initiative of the government.

16.6 An analysis of various five year plans from 1955 onwards reveals the following facts.

i Allocation of funds for education has been incongruent with the Plan provisions.

ii The utilization in Primary Sector has been dismally low compared to other sub-sectors.

iii Utilization of funds for university sub-sector has favourably matched with the Plan allocations.

iv Utilization of funds has been the highest during the Non Plan Period (1970-78).

16.7 Taking a cue from the above analysis, it has been proposed in the Policy that funds for Primary Education which yields maximum rate of return, should not be diverted to other sub sectors. Similarly, the experience of non-plan period during which the funds were provided on year to year basis exhibited maximum utilization needs to be adopted as an effective implementation strategy. Indeed, this approach involving annual operational plan in Social Action Programme during its first phase, has also worked fairly well to organize work programme of education development.

17. APPENDICES

EDUCATION STATISTICS

1996-1997 TO 2003 & 2010

APPENDICES

PHYSICAL AND FINANCIAL TARGETS
1996-97 To 2003 & 2010

Appendix 'A'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
1. Literacy (Percentage)								
Male	50.0	52.0	55.6	59.2	62.8	66.4	70.0	85.0
Female	25.0	27.0	29.6	32.2	34.8	37.4	40.0	55.0
Total	38.9	40.0	43.0	46.0	49.0	52.0	55.0	70.0

Appendix 'B'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
2. Primary (5 - 9) Yrs.								
a. Population (000)								
Male	9839	10252	10612	10934	11203	11416	11584	13196
Female	9384	9712	10007	10274	10508	10711	10884	11337
Total	19223	19964	20619	21208	21711	22127	22468	24533
b. Enrolment (I-V) Classes (000)								
Male	8324	9250	10000	10425	10828	11263	11535	14500
Female	5400	5800	5929	6275	6690	7160	8664	11300
Total	13724	15050	15929	16700	17518	18423	20200	25800
c. Participation Rate(%)								
Male	85	90	94	95	97	99	100	110
Female	58	60	59	61	64	67	80	100
Total	71	75	77	79	81	83	90	105
No. of Schools (000)	145	150	152	155	157	160	162	190
No. of Teachers (000)								
Male	221.9	220.5	218.5	216.3	213.4	209.9	205.7	301
Female	117.6	125.8	134.7	144.0	154.1	164.9	176.5	138
Total	339.5	346.3	353.2	360.3	367.5	374.8	382.2	439

Appendix 'C'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
3. Middle (10 - 12) Yrs.								
a. Population (000)								
Male	4783	4896	5057	5229	5437	5704	5993	7075
Female	4720	4832	4975	5123	5294	5501	5723	6661
Total	9503	9728	10032	10352	10731	11205	11716	13736
b. Enrolment Classes (VI-VIII) (000)								
Male	2700	3050	3378	3966	4246	4468	4770	7050
Female	1650	1740	1954	2316	2393	2287	2840	4650
Total	4350	4790	5332	6282	6639	6755	7610	11700
c. Participation Rate(%)								
Male	56	62	67	76	78	78	80	100.0
Female	35	36	39	45	45	42	50	70.0
Total	46	49	53	61	62	60	65	85.0
No. of Schools (000)	15	16	19	22	24	27	30	60
No. of Teachers (000)								
Male	57.1	58.2	59.4	60.6	61.8	63.1	64.3	72.5
Female	38.7	39.5	40.3	41.1	41.9	42.7	43.6	49.0
Total	95.8	97.7	99.7	101.7	103.7	105.8	107.9	121.5

Appendix 'D'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
4. High (13 - 14) Yrs.								
a. Population (000)								
Male	3189	3264	3371	3486	3625	3803	3996	4799
Female	3147	3222	3317	3415	3529	3667	3815	4517
Total	6336	6486	6688	6901	7154	7470	7811	9316
b. Enrolment Classes (IX-X) (000)								
Male	1270	1300	1404	1450	1652	1967	2380	3820
Female	680	750	660	644	899	1231	1335	2690
Total	1950	2050	2064	2094	2551	3198	3715	6510
c. Participation Rate(%)								
Male	40	40	42	42	46	52	60	80
Female	22	23	20	19	25	34	35	60
Total	31	32	31	30	36	43	48	70
No. of Schools (000)	11	11	12	14	15	17	18	30
No. of Teachers (000)								
Male	111.0	110.9	111.0	111.0	110.9	111.0	110.9	110.7
Female	49.5	50.0	50.5	51.0	51.5	52.0	52.5	56.3
Total	160.5	160.9	161.5	162.0	162.4	163.0	163.4	167.0

Appendix 'E'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
5. Higher Sec. (15 - 16) Yrs.								
a. Population (000)	5470	5705	5860.4	6015.8	6171.2	6326.6	6482	8170
b. Enrolment (000) (XI-XII) Classes	600	650	690	730	770	810	850	1500
c. Participation Rate(%)	11	11.4	11.8	12.1	12.5	12.8	13.1	18.4
No of Schools	350	350	410	470	530	590	650	1100
No of Teachers (000)	10.4	11.0	11.6	12.2	12.8	13.4	14.0	21.0

Appendix 'F'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
6. Sec. Vocational/Commercial								
a. Enrolment (000)	32.10	33.90	35.70	37.50	39.30	41.10	43.00	56.6
b. No. of Institutions	410.00	435.00	460.00	485.00	510.00	535.00	560.00	715
c. No. Of Teachers (000)	3.30	3.50	3.70	3.90	3.90	4.10	4.50	8.2

Appendix 'G'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
7. Mono/Polytech.								
a. Enrolment (000)	42.12	45.40	48.70	52.10	55.40	58.70	62.00	87.20
b. No. of Institutions	84.00	94.00	101.00	110.00	118.00	127.00	135.00	201.00
c. No. Of Teachers (000)	2.14	2.24	2.35	2.45	2.55	2.65	2.80	3.90

Appendix 'H'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
8. Degree Colleges (Arts & Science)								
a. Enrolment (000)	**256**	**260**	**288**	**316**	**344**	**372**	**400**	**750**
b. No. of Institutions	**532**	**535**	**545**	**555**	**565**	**575**	**585**	**700**
c. No. Of Teachers	**20907**	**20970**	**21033**	**21096**	**21159**	**21222**	**21286**	**21737**

Appendix ' I'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
9. Degree Colleges (Professional)								
a. Enrolment (000)	**151**	**160**	**164**	**169**	**173**	**178**	**182**	**200**
b. No. of Institutions	**204**	**205**	**206**	**207**	**208**	**209**	**210**	**250**
c. No. Of Teachers	**6173**	**6296**	**6422**	**6551**	**6682**	**6815**	**6952**	**7986**

Appendix ' J'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
10. Universities								
A. General (including degree awarding institutes)								
a. Enrolment (000)	**72**	**73**	**78**	**83**	**88**	**94**	**100**	**150**
b. No. of Institutions	**42**	**42**	**43**	**44**	**45**	**45**	**45**	**50**

Appendix 'K'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
B. Engineering								
a. Enrolment (000)	**19**	**19**	**21**	**23**	**25**	**27**	**28**	**50**
b. No. of Institutions	**15**	**15**	**15**	**16**	**16**	**16**	**17**	**20**

Appendix 'L'

	1996-97 Actual	1997-98 Estimated	1998-99	1999-2000	2000-2001	2001-2002	2002-2003 Target	2010 Target
C. Agriculture								
a. Enrolment (000)	**10**	**10**	**11**	**12**	**13**	**14**	**15**	**25**
b. No. of Institutions	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**

Appendix 'M'

ALLOCATION FOR 1997-98

(Rs. In Billion)

Sub-Sector	Allocation		
	Development	Recurring	Total
Primary Education	5.197	29.103	34.300
Secondary Education	0.683	14.022	14.705
Teacher Education	0.152	0.474	0.626
Technical Education	0.355	1.193	1.548
College Education	0.448	4.799	5.247
University Education	0.426	2.492	2.918
Scholarships	0.237	0.013	0.250
Literacy & Non-Formal Educati	0.088	0.003	0.091
Miscellaneous	0.285	4.053	4.338
Total	7.872	56.152	64.024

Appendix 'N'

PROPOSED ALLOCATION FOR EDUCATION 1998-2003

(Rs.in million)

Year	GDP	Growth %	EDUCATION BUDGET			% Share of GDP
			Development	Recurring	Total	
Actual Allocation						
1997-98	2,882,100		7,872	56,153	64,025	2.22
Proposed allocations						
1998-99	3,083,847	7	15,419	61,677	77,096	2.50
1999-00	3,299,716	7	18,544	74,178	92,722	2.81
2000-01	3,530,696	7	22,314	89,256	111,570	3.16
2001-02	3,777,845	7	26,823	107,291	134,114	3.55
2002-03	4,042,294	7	32,338	129,353	161,692	4.00
		Total	115,439	461,755	577,193	

Appendix 'O'

DEVELOPMENT ALLOCATION FOR EDUCATION POLICY 1998-2003

(Rs. In million)

SUB-Sector\Province	Punjab	Sindh	.W.F.P	alochista	Federal	otal Public	rivate Secto	Total
Primary Education	25071	12536	7521	5014	5056	55199	7000	62199
Secondary Education	15883	7942	4765	3177	3373	35140	15500	50640
Teacher Education	904	452	271	181	192	2000	-	2000
Technical Education	3167	1583	950	633	666	7000	2500	9500
College Education	2263	1131	679	453	475	5000	1500	6500
University Education	-	-	-	-	6000	6000	2500	8500
Scholarships	679	339	204	136	143	1500	-	1500
Literacy & Non-Formal Educati	453	226	136	91	95	1000	-	1000
Libraries & Text Books	181	91	54	36	38	400	-	400
Miscellaneous	905	453	272	181	190	2000	1000	3000
Total	49505	24753	14852	9901	16229	115239	30000	145239
Other Federal Divisions					200	200		200
Total	49505	24753	14852	9901	16429	115439	30000	145439

Appendix 'P'

RECURRING BUDGET FOR EDUCATION POLICY 1998-2003

(Rs. In million)

SUB-Sector\Province	Punjab	Sindh	.W.F.P	alochista	Federal	otal Public	rivate Secto	Total
Primary Education	100286	50143	30086	20057	20225	220795	28000	248795
Secondary Education	63533	31767	19060	12707	13494	140560	62000	202560
Teacher Education	3616	1808	1085	723	768	8000	-	8000
Technical Education	12667	6334	3800	2533	2666	28000	10000	38000
College Education	9050	4525	2715	1810	1900	20000	6000	26000
University Education	-	-	-	-	24000	24000	10000	34000
Scholarships	2715	1358	815	543	570	6000	-	6000
Literacy & Non-Formal Educati	1810	905	543	362	380	4000	-	4000
Libraries & Text Books	724	362	217	145	152	1600	-	1600
Miscellaneous	3620	1810	1086	724	760	8000	4000	12000
Total	198021	99010	59406	39604	54914	460955	120000	580955
Other Federal Divisions					800	800		800
Total	198021	99010	59406	39604	65714	461755	120000	581755

Appendix 'Q'

ALLOCATION FOR EDUCATION POLICY 1998-2003

Total (Development + Recurring)

(Rs.in million)

Sub--Sector\Province	Punjab	Sindh	NWFP	alochista	Federal	otal Publi	rivate Secto	Total
Primary Education	125,357	62,678	37,607	25,071	25,281	275,993	35,000	310,994
Secondary Education	79,416	39,708	23,825	15,883	16,867	175,700	77,500	253,200
Teacher Education	4,520	2,260	1,356	904	960	10,000	-	10,000
Technical Education	15,834	7,917	4,750	3,167	3,332	35,000	12,500	47,500
College Education	11,313	5,656	3,394	2263	2375	25,000	7,500	32,500
University Education	-	-	-	-	30,000	30,000	12,500	42,500
Scholarships	3,394	1,697	1,018	679	713	7,500	-	7,500
Literacy & Non-Formal Educati	2,263	1,131	679	453	475	5,000	-	5,000
Libraries & Text Books	905	453	272	181	190	2,000	-	2,000
Miscellaneous	4,525	2,263	1,358	905	950	10,000	5,000	15,000
Total:	247,526	123,763	74,258	49,505	81,143	576,193	150,000	726,194
Other Federal Divisions					1,000	1,000		1,000
Total:	247,526	123,763	74,258	49,505	82,143	577,193	150,000	727,194

Appendix 'R'

STATEMENT OF IST TO 7TH PLAN ALLOCATION AND EXPENDITURE ON EDUCATION IN PAKISTAN

(Rs. in Million)

SUB-SECTOR	IST PLAN (1955-60)		2ND PLAN (1960-65)		3RD PLAN (1965-70)		NON PLAN PERIO (1970-78)		5TH PLAN (1978-83)	
	ALLOC.	EXPR.	ALLOC.	EXPR.	ALLOC.	EXPR.	ALLOC.	EXPR.	ALLOC.	EXPR.
PRIMARY EDUCATION:	51.40	21.20	78.00	18.80	67.51	24.74	473.93	443.76	3049.70	1413.10
SECONDARY EDUCATION:	68.10	44.00	96.40	95.30	294.18	124.50	502.52	541.55	3257.00	1090.10
TEACHER EDUCATION:	23.30	4.90	17.40	17.50	36.01	15.05	109.90	114.01	380.00	290.30
TECHNICAL EDUCATION:	-	-	-	-	-	-	-	-	-	-
COLLEGE EDUCATION:	31.80	29.50	17.00	68.30	64.04	64.16	314.81	374.02	767.00	536.60
UNIVERSITY EDUCATION:	48.50	36.50	47.50	58.90	91.95	59.69	334.05	398.78	725.00	687.00
SCHOLARSHIPS:	2.60	1.00	18.70	49.10	91.00	76.85	257.74	289.87	430.00	349.60
LITERACY & MASS EDUCATI	-	-	-	-	-	-	-	-	-	-
LIBRARIES & TEXTBOOK:	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS:	29.80	39.10	137.80	55.24	83.55	61.45	519.54	397.50	287.00	526.10
SUB-TOTAL:	255.50	176.20	412.80	363.14	728.24	426.44	2512.49	2559.49	8895.70	4892.80
OTHER DIVISIONS:	49.43	21.76	77.20	85.65	358.36	154.17	485.65	843.16	1802.30	750.70
TOTAL EDUCATION:	304.93	197.96	490.00	448.79	1086.60	580.61	2998.14	3402.65	10698.00	5643.50

(Rs. in million)

SUB-SECTOR	6TH PLAN (1983-88)		7TH PLAN (1988-93)		8TH PLAN (1993-98)		9TH PLAN (1998-2003)	
	ALLOC.	EXPR.	ALLOC.	EXPR.	ALLOC.	EXPR.	ALLOC.	EXPR.
PRIMARY EDUCATION:	7000.00	3172.40	10128.00	6399.17	32669.00	23340.37	69860.00	
SECONDARY EDUCATION:	4125.00	3231.02	6404.00	5507.31	16521.20	4930.36	33140.00	
TEACHER EDUCATION:	305.00	156.75	287.00	260.26	3360.00	616.93	2000.00	
TECHNICAL EDUCATION:	1315.00	857.95	2000.00	943.17	2447.00	2373.32	5000.00	
COLLEGE EDUCATION:	1300.00	991.95	61500.00	1730.54	2507.50	2350.80	2000.00	
UNIVERSITY EDUCATION:	2100.00	1629.70	1800.00	1890.86	4100.00	1727.75	4000.00	
SCHOLARSHIPS:	660.00	663.67	760.00	867.12	1400.00	1215.74	15000.00	
LITERACY & MASS EDUCATION	750.00	724.09	300.00	510.31	1750.00	409.16	1000.00	
LIBRARIES & TEXTBOOK:	455.00	128.32	86.00	26.85	200.00	19.20	300.00	
MISCELLANEOUS:	*570.00*	3663.97	*150.00*	*1216.44*	*3877.00*	*1217.85*	*1000.00*	
SUB-TOTAL:	18580.00	15219.81	22530.00	19345.98	68831.70	38201.50	119800.00	
OTHER DIVISIONS:	250.00	1386.20	154.78	880.95	200.00	165.99	200.00	
TOTAL EDUCATION:	18830.00	16606.01	22684.78	20226.94	69031.70	38367.47	120000.00	

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