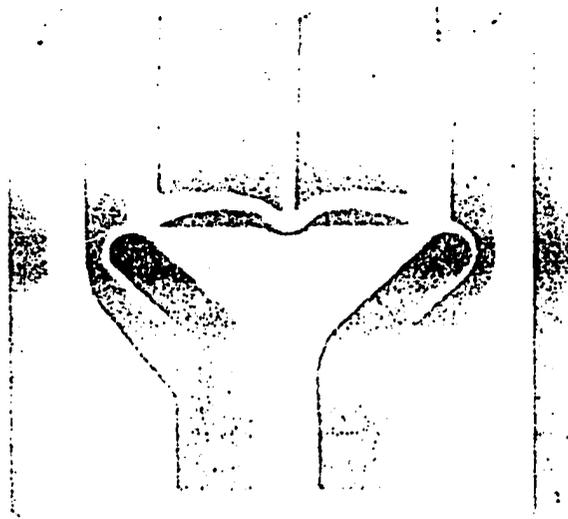


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BLACCDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 96 2061	9/29/1995 9/29/1995	1 - 1	24	11	0	8	1023
BLACDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 0 2031	9/29/1995 9/29/1995	1 - 1	128	2	32	0	500
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BPRJCDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 96 2061	9/29/1995 9/29/1995	1 - 1	24	11	0	8	1023
BPRJDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 0 2031	9/29/1995 9/29/1995	1 - 1	128	2	32	0	500
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BPRJXDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 96 2021	9/29/1995 9/29/1995	1 - 1	24	21	0	2	1023
BSNT	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 32 2030	9/29/1995 9/29/1995	1 - 1	4	128	16	1806	1806
BSNTC	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 16 2060	9/29/1995 9/29/1995	1 - 1	70	117	1	26	26
BSNTCDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 96 2061	9/29/1995 9/29/1995	1 - 1	24	11	0	8	1023
BSNTDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 0 2031	9/29/1995 9/29/1995	1 - 1	128	2	32	0	500
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BSNTXDD	SCOTT .APDMS .MIN 9/29/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 96 2021	9/29/1995 9/29/1995	1 - 1	24	21	0	2	1023
BURDOC	SCOTT .APDMS .MIN 10/ 3/1995	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 16 2030	10/ 3/1995 10/ 3/1995	1 - 1	4	128	2	1	1
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DDFC	SCOTT .APDMS .MIN 8/ 5/1994	(R:ANY; A:ANY; W:ANY; L:ANY; X:ANY) DISC :C 32 2020	8/ 5/1994 8/ 5/1994	1 - 1	23	89	5	342	342

NATIONAL EDUCATION POLICY '92



Education for all

MINISTRY OF EDUCATION, PAKISTAN

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POLICY INITIATIVES

PART ONE

1 Context and Conceptual Framework

1.1 THE CONTEXT

- 1.1.1 Policy initiatives for guiding educational reforms were proposed as early as 1947. More comprehensive documents on restructuring of education were those of 1959, 1972 and 1979. The reforms have appeared in four value areas: educational, social, economic and institutional. This has caused a ten-fold increase in educational facilities. Yet, the limitation of financial resources, poor appreciation of educational priorities, inadequate delivery system, and population pressure have never allowed a full expression of the desired change. As a social artefact education, so far, has not been able to assure good life for the individual and best arrangements for society. Its ability to build human capital which could provide high rates of return to society, has remained minimal.
- 1.1.2 The participation rates at various levels of education are low. The progress in the direction of universalization of primary education is far from satisfactory. At primary level, the drop-out rates are in the vicinity of 50%. The women participation in education is minimal. The policy on the medium of instruction has vacillated. The quality of public instruction continues to deteriorate; the system has not responded to the inputs made. The curricula, apart from being overloaded, have not kept pace with the advancement of knowledge. So are the textbooks which do not promote self-learning. The technical and vocational institutions are not dispersed equitably to enable the rural poor to benefit from these institutions. Nor has the vocationalization of education been pursued with the enthusiasm it deserved. The efficiency of higher education (general and professional) has dropped because of recurring problems of indiscipline and decline in professional standards of teachers. In this period of rapidly advancing frontiers of knowledge and intense scientific and technological activity, the research base in the universities has remained narrow. The mass education as well as technical and vocational education have failed to find an equilibrium of the type which could ensure the employability of the educated youth. The interface between society and education is resisting the diffusion of new ideas in either direction. The effective role of media for promoting education remains unprocessed. The silent culture of the rural poor and the urban worker is without a word; their children are being denied access to modern education. Much of social advancement has been hampered because the school has not been used as an agent for social change.
- 1.1.3 The conclusion is inescapable; a nation infected with development virus cannot afford to defer mass education. Nor should it deny all but marginal resources to the majority, and more so, if a tiny minority is to enjoy the luxury of schooling that would still be regarded as pitifully inadequate by international standards. This malaise is to be corrected. At best, the past has produced an educational system in which more college and high school diplomas are being awarded, but which means much less both in terms of kind and content of learning, and in terms of job qualification and life long earning. Several data

now confirm that expenditure incurred on education does represent investment in human capital. It has been shown, for instance, in developing countries that the rate of return (private and social) on human capital, by and large, exceeds the rate of return on physical capital. The capital-intensive nature of investment in developing human capital cannot be precluded.

- 1.1.4 These considerations, among others, have prompted the Government to reshuffle the priorities, restate the policy, revise the strategy, and re-examine the fabric of education so as to make it compatible with the demands of prospective economic activity, and social, cultural and political development of an egalitarian Muslim Society. In doing so, a series of educational conferences were held in the Provinces which were attended by a large number of educationists and educational administrators from the primary to the university level. Also, a national conference was held at Islamabad in April, 1991 under the chairmanship of the Federal Education Minister in which a cross section of the society comprising scholars, writers, newspaper editors, scientists, teachers and lawyers, discussed proposals which could be used for preparing the dynamics of the Education Policy. A large number of proposals on educational parameters were received from intellectuals and educationists in response to a letter written to them by the Education Minister. The basic principles of the policy framework were discussed by the Education Minister with the Education Committees of the Senate and the National Assembly. The problems identified, and the solutions presented at the conferences and meetings have been used to prepare the edifice of the present Policy. The Policy document has since been discussed in the inter-provincial ministers meeting, and modified in deference to the recommendations of the Provinces. The Policy does not propose to start from the first milestone nor does it propose to demolish the existing structures. The Policy restates the objectives of education and proposes to introduce all pervasive reforms for increasing the efficiency of the system and for adjusting new educational, social, economic and institutional values. However, as an underpinning of educational philosophy related to the predominant Muslim Society of Pakistan, this Policy proposes to suck into its lap the pristine, the mundane and the modern after arranging relative educational priorities in a sequenced time frame. The target is the creation and implementation of educational programmes from which the nation, hopefully, will be able to draw inspiration in its march towards the twenty-first century, and in its effort to meet the challenge posed by knowledge explosion.

1.2 **CONCEPTUAL FRAMEWORK OF THE POLICY**

- 1.2.1 **First, a predominantly Muslim Society, as is the case in Pakistan, and the determination of the Government to introduce Islamic Order in society brings the educational system into sharp focus. The system of education cannot and should not be quarantined against**

the permeation of Islamic values. Perhaps, it is the school system alone which can bring highest dividends in the making of an Islamic, social, political, economic and ethical order. However, several initiatives in the past, using the loose term 'Islamization of Education', in an attempt to mould the system, have not yielded the desired results. **The present Policy perceives this issue as one of vital importance and proceeds to present a strategy which should enable the students to understand the message of the Holy Quran, imbibe the spirit of Islam, and appreciate its worldview in the context of new scientific and technological advancements.** The new thrust on the inculcation of Islamic values, hopefully, will make room for the application of principles which Islam preaches for the welfare of society, and for the progress of practicing Muslims.

- 1.2.2 **Second, the purpose of education is to create a sizeable population of such educated men and women who could understand the world well enough and are able to bring about a change leading to adequate health and education services, a better environment, and elimination of ignorance and deprivation-limitations-which continue to strangle the developing societies. The Policy, therefore, adhering to the principles of equity, quality and efficiency will place added emphasis on the education of the people, who are under-privileged and live in misery. They will not only be required to achieve skills in reading, writing and arithmetic, but also would be enabled to understand the factors which have historically contributed to their unsavoury place in society. Consequently, 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 – the drama of under-development'. Certainly, the achievement of this goal will receive support from the comprehensive commitment of the present Government for creating an egalitarian Muslim Society and for promotion of education, knowledge and merit. Furthermore, it is through this approach that we shall be able to cause the growth of an intellectually healthy Muslim nation ready to meet challenges of the twenty-first century.**
- 1.2.3 **Third, the dilemma of educational development is nowhere as acute as in the choices between universal primary education (UPE) and adult education. Considering the low literacy rates and low participation rates at the primary level, the sub-sectors retain a high place on the priority list of educational development. The dilemma is essentially due to limitations of finance; the costs involved are almost prohibitive. Yet, the policy places equal emphasis on universal primary education and adult education. However, it proposes to attract private finance by shifting most of the adult education programmes to non-governmental organizations to be supported through 'incentive' grants from Provincial and Federal Education Foundations.**
- 1.2.4 **Fourth, only a limited progress has been made in reducing rural-urban educational disparities. If anything, the disparities have accentuated in terms of access to quality**

environmental education, it does not seem possible that the general school will be able to absorb vocationalization of any kind. Addressing these questions, the Policy proposes the establishment of two types of school systems; the Academic High School, and Vocational High School, each with 12 years of schooling (higher secondary; HS). It also proposes the shifting of classes XI and XII from the colleges to the general schools and vocational schools. The vocational school can concentrate on agricultural, technical, commercial, and Biomedical education, among others.

- 1.2.8 Eighth, the sustainability of the educational process, sharpened on the hone of excellence, calls for increased and persistent professional inputs into the process. This is a difficult and most complicated area and yet of high importance. Quality does not find a niche at any level of education. It must assert itself at all rungs of education; primary, secondary and tertiary. The dilemma of quality, coupled with ever increasing number of students, presents difficult choices in the face of restricted and limited flow of funds to the education sector. In looking up to the next century, any plan that does not make room for students of eligible age groups to attend school will be detrimental. By the same token any plan which compromises on quality will be equally, if not more, harmful. Being cognizant of this dilemma, the Policy proceeds to delineate initiatives for a pragmatically targeted 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.
- 1.2.9 Ninth, the crisis in higher education is evident from several indicators. In general, the internal and external efficiencies of higher education are minimal. The demand for higher education is increasing rapidly. The facilities are deteriorating. The library resources are not enviable. The equipment is insufficient. Social inequality is increasing. Graduate unemployment is on the increase. The political will to deal with student indiscipline is lacking. The research output from the universities is next to none. All this adds upto a degenerate system of higher education, which cannot stand up to the challenges of international competition. The Policy, recognizing the contributory role of higher education in economic development, proposes new initiatives for (a) increasing the efficiency of higher education, (b) strengthening the existing graduate study programmes, (c) improving the delivery system, (d) expanding the capabilities of the universities for creating new knowledge, and (e) enhancing the entrepreneurial role of the universities. Obviously, the success of these reforms cannot be assured unless there is a free flow of substantially increased funds to higher education.

- 1.2.10 **Tenth**, the teacher who carries the major responsibility for implementing education policies, is neither equipped nor motivated to bring about the required change. It is, therefore, of utmost importance that as reforms are introduced for widening the base of education and for improving curricula, textbooks and evaluation mechanisms, the motivation of the teacher is enhanced to participate in the teaching-learning process. This could be done through a system of rewards, incentives, career opportunities, training facilities, and prominent status in society, yet subjecting them to a system of accountability through a process of performance evaluation. In the fall of the teacher has fallen the quality of public instruction. And, it is in his rise alone that the quality of education will rise to the expected heights. **Accordingly, the 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 revives commitment to his profession and is also given a place of honour and recognition in society.**
- 1.2.11 **Eleventh**, whereas the role of teachers, curricula, textbooks and facilities cannot be overemphasized for a facilitated teaching-learning process, the psychological and behavioural preparation of students for learning and achievement remains a necessary precondition for the success of the educational process. After all, it is the student who is to benefit from education by adding to his life-long learning. Unfortunately, in the existing institutional milieu, this precondition is not being satisfied. As a result, generally, a state of crisis has mushroomed inside and outside the classroom. **This be so, the Policy proposes pervasive reforms to correct this malaise. Whereas, on the one hand, Policy parameters provide for improving the corporate life of students on the campuses, on the other hand, it suggests several measures for depoliticizing the campuses and regulating the conduct and behaviour of students as demanded by the norms of a university culture.**
- 1.2.12 **Twelfth**, the critical path to excellence in education passes through the evaluation process. Unfortunately, large scale cheating and other malpractices in examinations have by and large eroded the credibility of public examinations. Neither the annual system of examinations, nor the semester system, provide a real measure of the achievement of a student. The measurement tools used in any of these systems are far from satisfactory. An uneasy coexistence with a system of evaluation, which does not promote learning and which does not improve qualifications for the job, is eroding the intellectual strength of the nation. **The Policy, in addition to making proposals for the reform of existing evaluation systems, identifies a new means of regulating access to higher education through a National Testing Service. Hopefully, the new professionally structured Testing Service will cause improvement in the examination systems, and will at the same time strengthen the principle of merit for selection.**

- 1.2.13 **Thirteenth**, the syndrome of educated unemployment is a product of an educational system which is unrelated to the needs of the economy and the characteristics of the job market. The education imparted for the award of diplomas and degrees, prepares the youth only for a narrow and crowded job market in the public sector. This trend, unfortunately, has promoted open unemployment or underemployment of high magnitude. We have grappled with this problem in the past through vocationalization of general education, but with little success. **The new Policy parameters suggest several types of innovations for diversification so as to transform the system from supply orientation to demand orientation. 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. The Policy also emphasizes the need for manpower planning.**
- 1.2.14 **Fourteenth**, public expenditure on education, measured by any standard, has always been inadequate. The percentage of GNP allocation to education sector during the last decade has not been enviable. Further the Iqra fund, designed to facilitate educational development, has been absorbed in the general scheme of the economy. Whereas demand for education at all levels is on the increase, the matching public funds are least likely to be available in the near future because of competing demands from other sectors of the economy. More so is the alarming state of investment of public finance in higher education: one, higher education and research are capital-intensive, and two, higher education is heavily subsidized, and as such, recovery on the cost of higher education is minimal. Given these circumstances, the Policy suggests the need for generating alternate sources of funds for financing higher education. **Some of the measures being proposed include: improvement in the internal efficiency of higher education institutions, increase in fees, recovery of full user charges, resource generation by the universities through promoting their entrepreneurial role, increased allocation from Iqra fund, and attraction of private finance for all levels of education, in particular for higher education and research.** Whereas the private sector in general will be given a number of incentives, a more intensive role in this regard will be played by Provincial and Federal Education Foundations. It is hoped that the package of new measures proposed in the Policy will go a long way in supporting educational development on the lines dictated by the needs of the nation in this period of intensive scientific and technological activity.
- 1.2.15 **Fifteenth**, notwithstanding the importance of delivery system, the curriculum plays a pivotal role in the process of education. The development of curriculum is a dynamic process which assumes its best shape if it is leavened with professional inputs both in content and design. The curriculum reforms introduced in the seventies have outlived their utility. The knowledge explosion demands an equally rapid turnover of curricula

and textbooks. Furthermore, the development of textbooks either in content or quality has been least enviable. The presently used procedures for the development of textbooks only end up in a monopoly of a low quality product. The school education has suffered excessively at the hands of curricula and textbooks. Obviously, therefore, substantial reforms are needed if the quality of education is to be raised to an acceptable level. **The Policy considers the curriculum as a central covenant of educational development, and calls for sweeping reforms such as (a) starting a new cycle of curriculum development at all levels of education by professionals who are trained in the science of curriculum development, (b) bringing about cognitive compatibility between one level of curriculum and the next, (c) eliminating unnecessary overcrowding of subjects in curricula, and (d) allowing the production of textbooks in the private sector with the possibility of different books to be prescribed by different institutions.**

1.2.16 **Sixteenth**, education in Pakistan has developed under severe financial constraints. Much of its financing has come from the public sector. Nationalization of private educational institutions in the seventies, on the one hand, increased financial burden of the Government, and, on the other hand, led to complete withdrawal of the private finance from the education sector. More recently, incentives have been designed to attract private finance into education. **It is one of the objectives of the Policy that rapid means should be available for supporting private enterprise in education. The Policy is proposing innovations in the form of Provincial Education Foundations and a Federal Education Foundation to seek support of the private sector for educational development.**

1.2.17 **Seventeenth**, the dynamism of policy parameters can be best captured by innovative approaches to development. The innovations are a tool for quantum jump towards excellence. The Policy proposes a number of pragmatically designed innovations in a number of sub-sectors of education. Some of these innovations relate to:

- i) opening non-formal education to non-governmental organizations;
- ii) achieving 100% literacy in selected districts;
- iii) setting up model schools (male and female) in rural areas;
- iv) introducing a flexible policy on medium of instruction;
- v) involving institutions of higher education in crash training programmes for science teachers;
- vi) introducing computer education at all levels of education and in all educational management and teacher training programmes;
- vii) introducing science kits for creative laboratory experiments;

- viii) establishing Education Foundations for supporting private enterprise in education;
- ix) introducing incentives based on performance evaluation of teachers;
- x) establishing National Testing Service (NTS);
- xi) introducing compulsory social service for students;
- xii) promoting education of females through a combination of non-formal and distance education modes;
- xiii) merging secondary and higher secondary levels into the school system;
- xiv) setting up separate academic and vocational higher secondary schools;
- xv) diversifying degree level education to increase employability of graduates;
- xvi) using general schools as technical schools in the evening shift to capture the drop-outs of general education;
- xvii) appointing Ombudsmen in the universities to deal with the complaints of students;
- xviii) encouraging progressive privatization of public sector universities;
- xix) establishing National Council of Academic Awards and Accreditation (NCAAA) for colleges and other institutions which are given degree awarding status;
- xx) establishing Provincial Funding Councils (PFCs) for the colleges;
- xxi) providing incentives for accredited international universities to set up their sub-campus in Pakistan in collaboration with the private sector;
- xxii) setting up science parks in the universities to improve industry-university relationship;
- xxiii) removing of the restrictions of No Objection Certificate (NOC) for scientists and scholars invited to participate in international conferences, seminars and workshops;
- xxiv) introducing education cadre for teachers at par with other services;
- xxv) opening colleges of distance education in the Provinces;
- xxvi) setting up an Institute of Education Technology (IET) for preparing and producing educational materials for dissemination through second TV channel;
- xxvii) introducing high technology disciplines in selected polytechnics and engineering universities, and high science disciplines in selected general universities;
- xxviii) setting up of an Institute of Reverse Engineering;
- xxix) opening four self-sustaining biotechnology centres in universities;
- xxx) supporting public sector for promoting education industry in the private sector;

- xxxi) institutionalizing manpower planning for educational development;
- xxxii) setting up a National Education Management Information System (NEMIS) for proper planning and manpower development;
- xxxiii) introducing zero-based budgeting for allocation of funds to universities;
- xxxiv) shifting education from supply to demand-oriented study programmes;
- xxxv) allowing development of textbooks in the private sector;
- xxxvi) giving option to educational institutions to select books from those prescribed by education departments.

1.2.18 To sum up, the educational reforms proposed in this Policy are aimed at bringing a social change as dictated by the teachings of Islam, universalising primary education, improving the quality of education, unleashing the energies of the nation for participation in nation building pursuits, inculcating high moral, ethical and civic values amongst students, raising the quality and diversifying the graduate and postgraduate study programmes, emphasising improvement in quality of research in new and economically productive fields, streamlining the management, monitoring and evaluation of educational programmes, shifting higher education from supply to demand-oriented study programmes, creating an overall operational framework which could stimulate improved quality by ensuring effective translation of agreed policies into concrete action at the level of educational institutions, and improving the development and delivery of services at the institutional level.

2 Objectives of the Policy

2.1 OBJECTIVES

- 2.1.1 To restructure the existing educational system on modern lines in accordance with the principles of Islam so as to create a healthy, forward-looking and enlightened Muslim society.
- 2.1.2 To promote the teaching of Islamic Social Sciences to enable the students to understand the Islamic worldview and to strengthen their cultural moorings as members of the Muslim Ummah.
- 2.1.3 To bring out the creative, critical and dynamic abilities of students which may enable them:
(a) develop a balanced outlook about man and nature, (b) increase their lifelong earnings and contribute to the social and economic development of the country and Ummah, and (c) defend the ideology of Pakistan at the interface of international, social, political and economic development.
- 2.1.4 To provide equal opportunities to the children of the poor and the rich alike in order to promote national harmony and cohesion.
- 2.1.5 To ensure 100 per cent participation of children in education at the primary level by the year 2002, and to eradicate illiteracy through formal and non-formal methods.
- 2.1.6 To pay special attention to the development of female education and literacy through formal and non-formal systems, particularly in rural areas.
- 2.1.7 To improve the quality of education: (a) by revising curricula, improving physical facilities, and making the teaching-learning process more effective at all levels of education, (b) through extensive use of media for educational purposes, and (c) by intensifying research activities in the universities especially in modern fields of science and technology.
- 2.1.8 To make efforts to promote academic and democratic culture in institutions of higher education within the framework of national objectives and requirements.
- 2.1.9 To recognise the importance of teacher by giving him due status in society through awards and incentives, but at the same time promoting in him sense of responsibility and professionalism through accountability to the community.
- 2.1.10 To redesign and expand technical, vocational, and engineering education facilities in the light of new emerging technologies needed for industry, thereby enhancing the employability of the educated youth.
- 2.1.11 To promote sports, cultural and recreational activities at all levels for the development of moral, physical and social abilities of the youth.
- 2.1.12 To encourage and involve the private sector for participation in the educational system

within the framework of National Education Policy.

- 2.1.13 To create in pupils a capacity for self-learning and self-reliance so that their learning process continues throughout life.
- 2.1.14 To ensure the participation of the community in educational affairs and to train students for extending assistance to the community in solving their problems.
- 2.1.15 To obviate ethnic prejudices and superstitions, discourage consumerism, fanaticism and sectarianism.

3 Religious and Moral Education

3.1 BACKGROUND

- 3.1.1 Since the inception of Pakistan, it has been the endeavour of all governments to transform its predominantly Muslim population into an egalitarian Muslim society, and enabling the society to emulate the principles enshrined in the Holy Quran and Sunnah. Education, with a modicum of success, has been used as a means of achieving this objective. The report of the National Commission on Education (1959) and the Education Policy (1979) made considerable progress in this regard. In particular, in the 1979 Education Policy an educational framework was introduced for inculcating Islamic values in students for improving the quality of Islamic education in Deeni Madaris, and for creating Pakistani nationhood. As a result, any material which was considered repugnant to the teachings of Islam was removed from some 551 titles used as textbooks. Completion of Quran Nazira was made compulsory for passing the matriculation examination. Pakistan Studies and Islamiyat were introduced as compulsory subjects from classes I-XIV and in professional colleges Urdu was made a compulsory subject for classes I-XII. All students in classes VI-VIII received compulsory education in the Arabic language. The condition of Deeni Madaris was improved through financial assistance, provision of library books, and equating the prestigious degrees of these Madaris with M.A. degree in Islamiyat or Arabic. The Education Policy proposes to pursue these initiatives with increased avidity; yet it considers these initiatives insufficient for a fuller intellectual and moral development of youth in the face of increasing challenges from free competitive societies built on the edifice of a worldview presented by science and technology.
- 3.1.2 Islam presents its own worldview, a worldview which comprehends more than what science and technology can comprehend; a worldview which identifies, life, eternity, unity, power, truth, beauty, justice, love and goodness. Munificence, mercy and forgiveness are attributes of love which man is to inculcate and distribute. Goodness is the essence of human ego, for, man is created in the best of forms. The stress is on the beauty of action and deeds of high value. Patience is graceful; excellence of deeds is never wasted, and beautiful deeds shall receive the highest reward. Understanding raises man's dignity. Those who do not use intellect are like a herd of goats, deaf, dumb and blind. The ideal of intellect is to know truth from errors. Wisdom means the knowledge of facts, ideals and values. Knowledge is gained by inference, by perception and observation, and by personal experience or intuition. The study of nature is illuminating for the men of understanding. Knowledge of the phenomenal world which the senses yield, is not an illusion but a blessing for which man should be thankful. So is the worldview of Islam, based on the message of the Quran. No other worldview, certainly not of science and technology, would stand up to the social organization designed by the worldview of Islam.
- 3.1.3 It is in this area that the Policy intends to go beyond the Islamic content of present

education. The design of the Education Policy is such that the youth is released from the self-created myth of apologetic psyche, and of inferiority complex in the presence of western political, social, economic, and cultural onslaught. The youth must be prepared to confront the worldview of science and technology. Not only this, the values emerging from the worldview (more expanded) of Islam must be allowed to permeate into the society through reconstructed curricula. This would also call for a major change in the training programmes of teachers, diverting part of their training to study the basis on which the Islamic worldview stands; they must be equipped to use their knowledge for the benefit of the youth, both inside and outside the classroom. Science and technology is another matter, but certainly, in the field of moral philosophy we have not much to learn from the West. The area of Islamic sociology has not been researched. This should be done urgently to bring out the best in our religious-philosophical thought for the education and training of the youth.

3.2. POLICY STATEMENT

3.2.1 The existing provision of Islamic education will form the basis for the development of new curricula which, apart from religious content, will have moral content drawn from the worldview of Islam. At secondary and post-secondary levels, a coherent comparison of the worldview of science and technology and Islam will be presented. Religious education will be used to train students in the teaching and practice of Islam and in submission to the wishes of God. The religious education will be so directed as to enable students to imbibe high ethical and moral values encoded in the spirit of Islam, preparing them at the same time as members of a healthy, forward-looking and enlightened society. Curricula of teachers' training programmes at all levels will include religious education designed to enhance their understanding of the worldview of Islam.

3.3 STRATEGY

3.3.1 Teacher will be considered a focal point for dissemination of information on fundamental principles of Islam as laid down in the Quran, 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, and principles and methods of teaching Islamic courses. The teacher during contact with students in tutorial hours will discuss the Islamic social order, and Islamic concepts of justice, love, beauty goodness, co-existence, knowledge, study of nature, and man's place in society.

- 3.3.2 Moral education based on Islamic values will be the main theme of the Islamic curricula. Curricula will be revised accordingly, and new books with lucid presentation on Islamic thought will be prepared for use by students.
- 3.3.3 The work and contribution of Muslim philosophers will form a compulsory part of the teaching of Islamic curricula at appropriate levels of education.
- 3.3.4 Schools and colleges, during morning assemblies and during the periods set aside for religious and moral education, will emphasize character building, high moral values, and societal development, based on the injunctions of the Quran and Sunnah.
- 3.3.5 Second channel of TV will be used to disseminate information about the worldview of Islam and Islamic values.
- 3.3.6 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.
- 3.3.7 Video cassettes of special lectures of high ranking Islamic scholars and scientists will be prepared and broadcast through electronic media.
- 3.3.8 Quran Nazira will continue to be compulsory. However, the meaning of the verses of the Holy Quran along with detailed commentary will be emphasized at secondary and post-secondary levels.
- 3.3.9 The recommendations of the Commission on Islamization of Education will be implemented after approval of the Parliament.

4 Primary Education

4.1 BACKGROUND

- 4.1.1 Universalization of primary education has remained a desired goal of successive policies and plans. This has yet to be achieved. The limitations which have obstructed universalization, include: (a) low female participation (because of insecurity of girl students, and distance of homes from schools); (b) rapid increase in the population of 5-9 age group; (c) drop-out rate of upto 50%; (d) lack of access to primary schools; (e) resource availability; (f) school hours; and (g) opportunity cost. The female participation rate varies from 8% in Balochistan to 26% in the Punjab. In Sindh only 33 children out of 100 complete the cycle of five years. In Balochistan the drop-out varies from district to district, being as high as 85% in some districts. In the NWFP, it is 60% for males and 75% for females. The factors affecting drop-out are: poverty, attitude of parents, illness, ignorance of parents, unattractive schools, poor quality of teachers, and irrelevance of curriculum, among others.
- 4.1.2 The present number of primary schools, including mosque schools, stands at about 124,000 with an enrolment of about 11.5 million. By the year 2002 the population of 5-9 age group will rise approximately to 22 million. To achieve universal primary education, additional places will be needed for 10.5 million students. This will require 107,000 new primary and mosque schools. Further, two-room buildings would be needed for 24,750 shelterless schools and 20,000 one-room schools would also require improvement. The number of additional teachers required for this task would be 265,000. More recurring costs may be contemplated for subsidy on learning materials and expansion of the administrative and management machinery for primary education.
- 4.1.3 The quality aspect of education has been compromised because of rapid expansion of the primary system. This calls for an urgent examination of the measures needed for raising the quality of education.

4.2 POLICY STATEMENT

- 4.2.1 Primary education shall be recognized as a fundamental right of every Pakistani child. Primary education shall be made compulsory and free so as to achieve universal enrolment by the end of the decade. The medium of instruction as may be determined by the Provinces, shall be either the approved provincial language, the national language, or English. Special measures will be adopted for improving the quality of education. For this transitory period, the minimum norm will be a two-room Primary School with 5 teachers. Development of primary education in the private sector will be encouraged but regulated through stringent controls to discourage commercialization. Education Foundations will be established in

each Province, and at the Federal level, for development of education in the private sector. In due course of time, primary education will be transformed into basic education (elementary education extending to class VIII). The transformation will be protected by Federal or Provincial legislation.

4.3 STRATEGY

4.3.1 Teachers and Physical Facilities

- 4.3.1.1 About 265,000 new primary school teachers will be trained and recruited. Approximately, 107,000 new Primary and Mosque Schools will be opened, and one room each will be added to 20,000 one-room schools. Also 24,750 shelterless primary schools will be provided with two rooms each.
- 4.3.1.2 As far as possible, female teachers will be recruited for primary schools.
- 4.3.1.3 The upper age limit for appointment as primary teacher will be relaxed.
- 4.3.1.4 All types of human resources including retired and unemployed educated persons will be utilized for teaching at primary level.
- 4.3.1.5 The salary structure and service conditions of primary teachers (PTC) will be improved.
- 4.3.1.6 The remuneration of Moallima of Mohallah School and of Imam in the mosque school will be revised.
- 4.3.1.7 There will be no difference in the allowance of teachers serving in rural or urban areas.
- 4.3.1.8 The salary of primary teacher will be linked with his qualifications.
- 4.3.1.9 The primary teachers will receive periodical training for updating their knowledge and teaching methods.
- 4.3.1.10 The Non-Governmental Organisations (NGOs) will be encouraged to set up resource centres for the in-service training of teachers.

4.3.2 Curriculum and Medium of Instruction

- 4.3.2.1 Primary curriculum for classes I-III will be integrated into two books only: one integrating language, Islamiyat and science, and the other dealing with basic mathematics.
- 4.3.2.2 Quran Nazira shall start in class-I and shall be completed in the terminal year.
- 4.3.2.3 The curriculum shall be modified to include concepts which may increase the awareness

of students about society and Islamic ethos.

4.3.2.4 The medium of instruction shall be either provincial languages, the national language or English.

4.3.2.5 In rural areas, the school timings, including vacation, will be arranged according to the convenience of students, taking into consideration the cropping pattern.

4.3.3 Drop-out

4.3.3.1 Depending upon the region, factors contributing to drop-out shall be carefully studied and appropriate special inputs will be designed to reduce wastage.

4.3.3.2 Periodical tests will be given due weightage along with annual examinations for promotions from class I through class V.

4.3.3.3 Wherever feasible, the schools will run in two shifts.

4.3.3.4 The evening shift in such cases will develop into a work-oriented lower secondary technical school which may also be used for literacy programmes.

4.3.4 Women Participation

4.3.4.1 In areas where women participation is low, special incentive-oriented programmes will be created to enrol and retain them in schools.

4.3.4.2 Distance education programmes, for example, women matric, etc., designed by Allama Iqbal Open University (AIU), will be used for the education of women.

4.3.5 Administrative Measures

4.3.5.1 The programme of universal primary education will be carried out through active participation of the community and elected representatives with village as a unit in rural areas, and Mohallah in the urban areas.

4.3.5.2 Primary education authorities (Directorates of Primary Education) may be created at Federal and Provincial levels.

4.3.6 Quality

4.3.6.1 The training of teachers will include a comprehensive understanding of the new concepts introduced in the curriculum.

4.3.6.2 The 'Primary Kit' will be updated, its guides and work-books prepared in Provincial languages, and provided to all schools. The success of the Kit will be ensured by training teachers on the activities included in the Kit and their use in the classroom. Also, separate funds for purchase of consumables will be provided to each school.

4.3.6.3 Special Federal funds will be provided to improve the facilities which may be used for improving the learning process. This may include computers, science kits, and books dealing with general knowledge, sciences and mathematics.

4.3.6.4 The number of teachers in each primary school will be gradually raised to five over a period of ten years, and, as far as possible, will be recruited locally.

4.3.7 Basic Education

4.3.7.1 Basic education will extend over classes I-VIII.

4.3.7.2 The present system of primary education will be transformed gradually into basic education.

4.3.7.3 The targets of Social Action Plan (SAP) will also be extended to provide for basic education.

4.3.7.4 SAP, in addition to rural areas, will be extended to such urban areas as Kachi Abadis and slums.

4.3.8 Funds

4.3.8.1 Universalization of primary education will require massive resources. Thus, primary education will be supported through all possible sources including Iqra and Zakat funds.

4.3.8.2 The funds allocated to primary education will be non-transferable and non-lapsable; this will be guaranteed through legislation.

5 Literacy

5.1 BACKGROUND

- 5.1.1 Pakistan has one of the lowest literacy rates in the region currently estimated at about 34%. The national average according to the 1981 census was 26.2%. However, the wide disparities presented even a discouraging scenario. It ranged from 57.8% among the urban male population of Sindh to 1.75% among the rural females of Balochistan. In absolute terms, the number of illiterates in the ten plus age group, which stood at the daunting figure of around 43 million, has risen to an estimated 50 million.
- 5.1.2 It is generally recognized that a rather low participation rate of about 66.3% at the primary school level combined with a high wastage rate estimated at 50%, including drop-outs and repeaters, is the major cause of our low literacy rate. The literacy ratios have been further aggravated because of the absence of meaningful literacy programmes and a rapid population growth (3%; amongst the highest in the world).
- 5.1.3 Consequently, all children who are not enrolled, and those who drop-out early, join the multitude of illiterates every year. Even the neo-literates relapse into illiteracy due to the non-availability of appropriate post-literacy reading materials.
- 5.1.4 The problem of illiteracy is formidable both in its size as well as in its complexity. From a socio-cultural perspective, the traditional prejudices against educating females still linger on, particularly in the tribal and rural milieu. In the economic context, the opportunity cost discourages poor families from sending their children to schools. Non-availability of suitable reading materials in the regional languages poses further difficulties for a multi-lingual society. These difficulties are compounded by the non-availability of resources.
- 5.1.5 Even if the target of attaining universal primary education by the end of the next decade is achieved, the existing huge backlog of 50 million people (about 43 million in the productive bracket of 10-44, and an estimated number of 8 to 10 million children who will either fail to get enrolled or will drop-out on the way, before the attainment of UPE, and full elimination of wastage) cannot be abandoned to the fate of perpetual illiteracy. The Constitution explicitly provides that "the state shall remove illiteracy... within minimum possible period". The need for an effective literacy policy is therefore clearly indicated.
- 5.1.6 At present there is no national programme of adult literacy. A number of government and non-government organizations are running programmes for adult literacy and education of various types in different parts of the country. However, the effect of these programmes on general literacy situation in the country is only marginal.

5.2 POLICY STATEMENT

5.2.1 A planned effort will be made to increase the literacy rate to 70% by the year 2002. The target by 1995 is being set at 50%. This formidable challenge cannot be met by the government alone. The whole nation needs to be mobilized for launching a campaign against the scourge of illiteracy on a war-footing. The Provincial governments, NGOs, and local institutions shall be actively involved both in planning and implementation; the federal agencies assuming the role of coordination, monitoring and evaluation in addition to providing technical support for development of materials and training. Allocations for adult literacy programmes will be substantially enhanced at the Federal and Provincial levels. Acquiring literacy is enjoined on all Muslims as a religious duty; literacy programme shall therefore be supported substantially through the Iqra and Zakat funds.

5.3 STRATEGY

- 5.3.1 Primary education shall be made compulsory.
- 5.3.2 Drop-out rates will be drastically reduced.
- 5.3.3 The literacy programmes shall be implemented through the Provincial governments, NGOs and local organizations with appropriate support from the Federal government. NGOs will be supported in a massive way through financial support to enable them to undertake literacy programmes on a much larger scale.
- 5.3.4 An important reservoir of great potential exists in the form of people possessing Quranic literacy but not conversant with reading a text in any Pakistani language. According to 1981 Census the percentage of people in the ten plus age group who could read the Quran was 38.4, whereas 54 per cent were learning to read. The script of all Pakistani languages is based on the Quranic Naskh and 'illiterates' in both these groups can be made literate with a little more effort in much lesser time by introducing the additional letters of alphabet to them. A massive project will be launched to raise the level of literacy in this group to general literacy.
- 5.3.5 As far as possible, literacy programmes will be integrated with skill-based community development programmes. Simultaneous monitoring and evaluation will be made an essential feature of all literacy programmes to check wastage. Post-literacy phase will be made an integral part of all literacy programmes, and community libraries for neo-literates will be set up at the union council level.

- 5.3.6 Universities will be encouraged to play a greater role in training, curriculum development and material development for literacy programmes, and in the organization of student literacy corps.
- 5.3.7 Greater attention will be focused on the deprived segments of society in rural areas and urban slums, with special emphasis on female population.
- 5.3.8 The strategy of achieving 100% literacy in selected areas will be carefully employed to produce the emulative effect.
- 5.3.9 Public representatives regardless of political affiliation will be motivated to support the literacy effort in their respective constituencies by spearheading the formation of village development committees with literacy as their major concern.
- 5.3.10 The potential of electronic and print media will be fully utilized for motivating the public at large for supporting literacy effort, and for delivering the literacy programmes.
- 5.3.11 Adult literacy classes will be an integral component of the evening shifts in primary schools. Summer vacation as well as idle spells between various stages of examinations will be utilized to enhance the literacy effort through student volunteer corps.
- 5.3.12 Appropriate legislation will be enacted by the Provincial governments on the pattern of Literacy Act 1987, to provide incentives for acquiring literacy.
- 5.3.13 Suitable annual awards will be instituted for meritorious work in the field of adult literacy at the national, provincial and local levels.
- 5.3.14 Appropriate legislation will be enacted to make the funds allocated for the promotion of adult literacy, non-transferable and non-lapsable.
- 5.3.15 Directorates of adult education with wings at the divisional and district levels to provide professional training and guidance as well as monitoring and evaluation, will be established in each Province.
- 5.3.16 The National Education and Training Commission (NETCOM) shall be the main coordinating agency for adult education and literacy programmes, with functional arms at the Provincial levels. Considering the vital importance of training, a National Institute of Training and Research for Literacy (NITRL) will be established under the NETCOM for providing services to agencies engaged in literacy work.
- 5.3.17 An Action Plan to implement the strategies set out above will be developed by the NETCOM with the active participation of universities, particularly AIOU, NGOs, Provincial government departments and Federal ministries in the social sector.

6 Quality of Public Instruction

6.1 BACKGROUND

6.1.1 There is a general agreement that the quality of public instruction has deteriorated rapidly. This is particularly so in sciences, mathematics and languages. It has been suggested that quality aspect has been compromised because of expansion of educational institutions. The system has not responded to a large number of inputs made for raising the quality of public instruction. In higher education, indiscipline has considerably damaged the instructional programme. In general inadequate admission standards, poor quality of teachers, unmotivated learners, overcrowded curricula, badly written textbooks, impoverished physical facilities especially the science laboratories, and defective evaluation mechanism have been identified as areas of concern for quality aspects of public instruction. Basically the delivery of school curricula, that is, textbooks, teacher training and examinations suffer from a number of distortions. For example, the textbooks do not properly reflect the spirit and intentions of the school curricula. These are generally of poor quality and contain materials which are unnecessarily repetitive. The language in many cases is defective as is the presentation of concepts which are not in agreement with the comprehension level of children. Apart from poor layout and unattractive illustration design of science books, the books in social sciences fail to inculcate the desired national cohesion. Also, the teachers are not adequately oriented and trained in accordance with the needs of the curriculum. And the examination questions, based mainly on textbooks, are hardly designed to measure the competencies required to be inculcated in students. All this promotes rote-learning.

6.1.2 In the fields of science and mathematics, of the 10,000 science teachers in 6000 high schools, some 3500 are untrained. Similarly, of the 6500 middle science school teachers, only 1000 are trained. School science laboratories either do not exist or are poorly equipped. The condition of rural schools is even poorer. The teacher by and large is not performing the role expected of him.

6.2 POLICY STATEMENT

6.2.1 Improvement of the quality of public instruction will receive high priority. Major changes will be introduced in curricula, textbooks, teaching methods and evaluation techniques. The training of teachers will emphasize the acquisition of practical skills. The role of the teacher will be redefined. A system of punishment and rewards for teachers, based on performance evaluation, shall be introduced. The teaching-learning process will be strengthened through various types of inputs. The library systems at all levels of education will be strengthened and enriched with updated books, journals and magazines. The delivery of educa-

tional services to students which is rather unsatisfactory, will be improved by removing the present weaknesses. This may call for a re-examination of students' entry requirements, providing for incentives and accountability of educational institutions, training of personnel on the use of instructional resources, and making inputs from the world of work.

6.3 STRATEGY

6.3.1 Curriculum and Medium of Instruction

- 6.3.1.1 A new cycle of curriculum development will be initiated and a major effort will be directed towards improving the delivery of the curriculum.
- 6.3.1.2 The curricula shall encourage enquiry, creativity and progressive thinking through project-oriented education.
- 6.3.1.3 The professional base of institutions involved in curriculum development shall be enlarged.
- 6.3.1.4 All vocational curricula shall be related to employment market.
- 6.3.1.5 The linkages among curriculum development, textbook writing, teacher training and examinations will be reinforced.
- 6.3.1.6 Science curricula will be revised and made compatible with the demands of new knowledge. The weightage of mathematics and sciences shall be increased; mathematics shall be progressively included as a compulsory subject for all science students at the F.Sc. level. Crash programmes will be launched with the assistance of universities for the training of science and mathematics teachers.
- 6.3.1.7 A special mathematics course shall be introduced for students studying social sciences. The teaching of languages will be improved in order to enhance communication skills. The teaching of social sciences will be improved in content and quality.
- 6.3.1.8 Islamiyat and Pakistan Studies shall be adjusted to the learning level of students; the distortions removed and unnecessary repetitions avoided. New curricula and textbooks in Islamic and Pakistan Studies will articulate in a most attractive manner, the ethical, moral, social and religious values of Islam. At each appropriate level, the books on Islamic Studies will present the worldview of Islam as juxtaposed to the scientific and technological worldview. At secondary and tertiary levels, the teaching of Islamic philosophical thought will be introduced.

- 6.3.1.9 A strategy for introducing a wide range of vocational subjects relevant to job requirements in the employment market and for self-employment shall be formulated and implemented.
- 6.3.1.10 Concepts dealing with environmental education, health education and population education shall be integrated into the relevant subject.
- 6.3.1.11 Overcrowding and overlapping of concepts in the curricula shall be removed.
- 6.3.1.12 English may be used as one of the mediums of instruction, in addition to Urdu or a Provincial language.
- 6.3.1.13 At tertiary level, English may be the medium of instruction for science and technical subjects.
- 6.3.2 **Textbooks**
 - 6.3.2.1 Textbooks shall be revised and updated to incorporate new knowledge.
 - 6.3.2.2 Curriculum development and book development shall be coordinated.
 - 6.3.2.3 Workshop technique shall be adopted to develop new books. Concepts involved in the curriculum may be more comprehensively discussed in the textbooks with the use of graded vocabulary based on empirical research.
 - 6.3.2.4 Incentives shall be provided to teachers for producing new and attractive learning materials, making use of audio, video and print media.
 - 6.3.2.5 The scheme of textbook banks will be expanded to include all educational institutions.
 - 6.3.2.6 For each course, multiple textbooks may be approved and the institutions may be allowed to select any one of these texts. Private publishers may be encouraged to produce school textbooks.
 - 6.3.2.7 Special development projects will be launched for improving the libraries in schools, general and professional colleges and universities. Communities will be provided with matching grants to set up libraries for the use of common public.
 - 6.3.2.8 A separate budget for books and journals will be reflected in the annual budget of each educational institution.
 - 6.3.2.9 Use of library materials will be encouraged by teachers, through various types of academic assignments (essays, creative writing, problem solving, collection of new information, presentations in the class, among others).
- 6.3.3 **Teachers**
 - 6.3.3.1 A separate unit for organizing Teacher Training shall be set up by each Provincial

Education Department and at the Federal level.

- 6.3.3.2 Mobile training units may be set up for on-the-job training of teachers.
- 6.3.3.3 Teacher Training Institutions will be equipped and strengthened, and their faculty will be provided training to update their knowledge and skill.
- 6.3.3.4 A regular in-service training programme will be launched for teachers at all levels. Distance Education methods will be used for in-service training. Techniques and methods of community motivation towards education will be emphasized in training programmes. Computer education will be a compulsory component of all teacher training programmes.
- 6.3.3.5 Deficiency of science, mathematics and languages teachers shall be removed. Also, Special Scholarship Scheme will be started for those holding secondary or higher secondary qualifications in order to attract them to teaching professions.
- 6.3.3.6 A system of incentives will be created to encourage teachers to undergo in-service training. Special awards will be instituted for inventions and creative work.
- 6.3.3.7 The private sector will be encouraged to set up Teachers Resource Centres (TRCs) to which government school teachers may be nominated for training.
- 6.3.3.8 Teacher training curricula will be updated and the need for increasing the duration of teacher training will be assessed.
- 6.3.3.9 Teaching practice will be made a compulsory and necessary part of pre-service training programmes. It will be a separate head of passing. No B.Ed. degree will be awarded to those appearing as private candidates unless the 'Teaching Practice' part is completed to the satisfaction of examiners. Similar conditions may apply to B.Ed. programmes conducted through distance education.
- 6.3.3.10 A national commission for teachers will be set up for examining the problems of teachers and for suggesting ways and means for their solution.

6.3.4 Physical Facilities

- 6.3.4.1 Well-equipped laboratories for biology, physics and chemistry shall be provided in all schools and colleges, the rural schools and colleges receiving a special treatment. Separate Federal funds shall be created for this purpose.
- 6.3.4.2 Science laboratories shall be provided in all middle schools.
- 6.3.4.3 Science kits will be developed with emphasis on new and modern experiments and shall be provided to all middle schools.
- 6.3.4.4 Arrangements may be made for computer education at all levels through a phased

programme starting with secondary schools.

6.3.4.5 The college laboratories shall be modernized with assistance from public and private sectors.

6.3.4.6 Liberal grants shall be provided for books and journals.

6.3.4.7 Substantial grants shall be provided for consumable materials to facilitate practical work.

6.3.4.8 Science kits shall also be introduced in classes IX to XII.

6.3.5 Evaluation

6.3.5.1 A system of continuous internal evaluation culminating in the annual examination will be used to evaluate the performance of students. The certificate awarded to students will include marks obtained in internal evaluation as well as the final examination. Reforms will be enforced in the conduct of public examinations (Chapter 22).

6.3.5.2 A National Testing Service will be set up outside the government to standardize national norms and to develop tests for entry into professional institutions and universities, and award of scholarships for higher education.

6.3.6 Guidance and Counselling

6.3.6.1 A suitable institutional structure shall be established for the management of guidance and career counselling programmes to be introduced at the school, college and university levels.

6.3.7 Discipline

6.3.7.1 Stringent measures shall be taken to prevent the smuggling of arms and weapons into the premises of educational institutions.

6.3.7.2 Drug trafficking in educational institutions shall be checked through strict measures and penalties.

6.3.7.3 Disciplinary procedures in educational institutions shall be reformed and simplified to ensure a prompt and effective enforcement of discipline.

6.3.7.4 A system of teachers' accountability shall be developed and enforced to maximize the participation of teachers and students in academic pursuits. The performance evaluation of teachers will be based on reports dealing with teaching, research, guidance and counselling offered to students and tutorial work, among others. The accountability of teachers will be made fully effective at all stages of career development.

6.3.8 Quality Assurance

- 6.3.8.1 Mismatch between entry criteria and study programmes will be removed through guidance and counselling.
- 6.3.8.2 The mechanisms of institutional accreditation, academic programme validation, and allocation of sufficient resources according to defined criteria and documented performance indicators will be used for developing an effective system of quality control and assurance.

7 National Testing Service

7.1 BACKGROUND

7.1.1 Evaluation makes an important link in the teaching-learning process. Apart from a weak delivery system, the examination system is excessively flawed on account of a variety of malpractices. Neither the semester system nor the annual system have been able to stand up to the widespread corruption in examinations. Under a variety of circumstances, the examiners, the paper-setters, the invigilators, and the examination departments appear to be equal partners in maintaining the vicious circle of corruption around public examinations. Even the Boards of Intermediate and Secondary Education (BISE) have vied with one another in the award of unjustifiably inflated grades to their students. Also, in their anxiety to bring their wards to professional colleges, the parents have joined the rat race of nefarious practices. This state of affairs has caused two types of damages: (a) lack of confidence in the results of public examinations, and (b) distortion in admissions to professional colleges.

7.1.2 Implementation of examination reforms suggested in various reports have met with little success. While corruption continues to erode the sanctity of our examinations, there are other issues which also deserve serious attention. For instance, (i) the quality of question papers needs improvement so that these are able to test various abilities of students, (ii) objectives of education other than the cognitive ones need to be taken into account in the process of evaluation, and (iii) the time lag between holding of examinations and declaration of results ought to be reduced.

7.1.3 The Policy has attended to the problem with the seriousness it deserves, and proposes that efforts shall be made to improve the present system of examination in all respects. It also proposes that for the purposes of admission in colleges including professional colleges and universities, undue importance attached to the present examination results shall, in part, be surrendered in favour of scientifically validated national tests.

7.1.4 The development of these tests will be extremely useful in another way. Owing to establishment of a large number of teaching and examining bodies, the difference in the standards of various boards and universities has become a cause of concern. University Grants Commission (UGC) and Inter Board Committee of Chairmen (IBCC) will use these tests to monitor the standards of various universities and boards respectively, and develop a system of accreditation.

7.2 POLICY STATEMENT

7.2.1 A National Testing Service will be established for providing national level leadership in developing tests needed in educational setting, and carrying out research for

this purpose. The work of test development and research will be carried out by NTS on its own, or in collaboration with agencies and individuals within or outside Pakistan. The NTS will provide tests as well as testing services to schools, colleges including professional colleges, universities and other institutions. This agency will also be responsible for developing a system of academic accreditation of various institutions on the basis of the performance of students of these institutions on national tests.

7.3 STRATEGY.

- 7.3.1 National Testing Service will be established at the Federal level as a high level autonomous organization in close collaboration with UGC and IBCC.
- 7.3.2 The tests will be developed by NTS in collaboration with national and international agencies.
- 7.3.3 NTS will also organize the administration of tests at various places in Pakistan under suitable supervision.
- 7.3.4 The tests will be administered a number of times during the year so that a student may take a test at any time he is ready for it.
- 7.3.5 The merit for admission based on the results of public examination will be prepared as usual. However, each person on the merit list will be required to pass the national test before the admission is finalized. Failure in national test will make the student ineligible for admission, irrespective of his position on the merit list. The institutions will introduce regulations to accommodate this provision.
- 7.3.6 The students waiting for the results of examination shall be eligible for appearing in the national test.

8 Technical and Vocational Education

8.1. BACKGROUND

- 8.1.1 Technical and vocational education is offered at prevocational, vocational, technical and professional levels. Those who qualify as scientists and engineers make only a minority of the total work force. With the advent of new technological age, the 'old skills' may no more be needed. The new worker has to be trained on different types of machines demanding different types of skills.
- 8.1.2 Over the years, increase in the number of technical and vocational institutions has been accompanied by a sizeable growth of technical, vocational and agrotechnical education in various regions of each Province. However, this spread is not in line with the needs of job market. Training of the semi-literate drop-outs also remains a problem. New possibilities need to be considered for improving the status and career opportunities of the technicians. Much of our success in making education meaningful, will depend on our ability to expand a demand-oriented technical and vocational education, and to reinforce general education with vocational subjects in an attempt towards vocationalization (polytechnicalization) of education. Introduction of a new model of vocational high school may be a useful innovation.

8.2 POLICY STATEMENT

- 8.2.1 The number of technical and vocational institutions will be increased and facilities for technical and vocational education will be made available at tehsil level in accordance with the needs of the area. The private sector will be invited to set up technical and vocational institutions and will be provided incentives for this purpose (through Provincial and Federal Education Foundations). The status of and career opportunities for technicians will be improved. The curricula will be kept under constant review to ensure that changes on account of advancement in technologies as well as emerging technologies are incorporated in the courses of study. A network of technical teacher training institutes will be established, one in each Province, and linked with the National Teacher Training College at the Federal level. A large number of trade schools will be developed in the rural areas as a part of general middle and secondary schools in the evening shift. One vocational subject will be a compulsory part of general education. More opportunities will be provided for the technical and vocational education of women.

8.3 STRATEGY

- 8.3.1 The existing polytechnics will be consolidated and their teaching programmes will be

diversified through the introduction of selected high technology disciplines, keeping in view the type of work force needed for meeting the requirements of high technology industries emerging in Pakistan.

- 8.3.2 A parallel stream of vocational high schools will be introduced so that one such school for males at tehsil level and one for females at district level is located in line with the needs of the area.
- 8.3.3 Each district headquarters shall have one polytechnic for males, and each division headquarters shall have a polytechnic for females, depending upon the needs of the area.
- 8.3.4 A network of colleges of high technology offering study programmes leading to graduate and postgraduate degrees will be established in the country wherever feasible. Some of the existing degree colleges may be converted into colleges of higher learning and technology. The study programmes will be oriented towards acquisition of practical skills.
- 8.3.5 Industrial training for engineering and technology graduates shall be regulated through legislation.
- 8.3.6 Opportunities shall be provided to polytechnic graduates for higher studies at home and abroad.
- 8.3.7 Linkages shall be established between technical and vocational institutes and industrial units.
- 8.3.8 Production units, wherever feasible, may be established in selected vocational and technical institutions.
- 8.3.9 Private sector will be encouraged to set up training centres in industrial units.
- 8.3.10 A national council of technical and vocational education shall be established.
- 8.3.11 Curricula shall be modernized. Facilities for agrotechnical education in general schools shall be improved.
- 8.3.12 Computer education will be a compulsory part of the curriculum at all levels of technical and vocational education.
- 8.3.13 The whole process of vocationalization of education shall be reactivated and new subjects shall be added to increase the employability of the educated youth.
- 8.3.14 Suitable arrangements will be made for testing and certification of the skilled learners, trained outside the school system.
- 8.3.15 Technicians and Technologists will receive the same dignity as those from other streams of education.

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- 8.3.16 Technical education will be introduced as a separate stream of education in general schools at appropriate level, preferably as evening shift.
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9 Higher Education and Science

9.1 BACKGROUND

9.1.1 Knowledge intensive technologies have made rapid strides in the last few decades. More extensive activities are likely to take place in the pursuit of new knowledge. The type of work force required for acquisition and use of high technologies places different types of demands on higher education. The further growth of higher education, especially in scientific and technological fields, should be planned. Despite 301 colleges, 22 universities (general: 13, engineering: 4, agriculture: 3, health sciences: 1, management sciences: 1), Area Study Centres and Centres of Excellence in specialized fields, and substantial increase in enrolment, higher education has neither kept pace with recent advances in knowledge, nor has it been able to establish a broad base for high level scientific and technological research. The degree level education is hardly sufficient; the university departments are ill-equipped and improperly staffed. New disciplines of science on which future technological advancements are based, have yet to be developed in the universities. The added problem of indiscipline has created chaos in study programmes. The degree level general education is merely supply-oriented. All this calls for re-examination of the priorities within the higher education sector. The professional education (engineering, medicine, agriculture and veterinary) has shown restricted growth in the area of applied research. The University Grants Commission has yet to play a more definite role in raising the standards of teaching, examinations and research, and in orientating university programmes to national needs. With this state of affairs, unless major new inputs are made, it is difficult to conceive that higher education system will be able either to produce manpower of acceptable quality for jobs in the employment market, or for accelerating the pace of economic activity through generating new knowledge (research). The whole higher education system needs a new kind of treatment, vigorous leadership, strong political will and substantially increased financial input, a major chunk of which must be generated by the universities themselves.

9.2 POLICY STATEMENT

9.2.1 A liberal, free, democratic and competitive university culture leavened with Islamic values will be promoted. Participation rates of higher education will be enhanced. The performance of higher education will be improved through increased inputs in graduate study programmes and research. Higher education which is presently supply-oriented will be made demand-oriented. Universities will be encouraged to generate funds by various means and will be provided sizeable endowments, to enable them to move towards financial self-sufficiency and financial autonomy. Participation of teachers at the international conferences

will be facilitated. Measures will be taken to enhance the internal and external efficiency of higher education. The 'Acts' of the universities will be revised to facilitate and improve financial and administrative management of the universities. More powers will be given to the UGC to oversee the academic standards, financial management, and development of the universities. Science and technology sector and higher education will collaborate for developing and implementing a common plan for advancement of research. More funds will be provided to universities for research. A separate higher education research policy will be formulated. The private sector will be encouraged to establish institutions of higher education. Universities will be made to develop close linkages with community and undertake the study of their problems. Degree level education will be restructured and diversified. Degree level colleges will be made more autonomous and the feasibility of setting up a separate Funding Council for Colleges (FCC) in each Province will be considered. A National Council of Academic Awards and Accreditation will be established to regulate the academic affairs of such degree-awarding institutions which are not affiliated with the universities. To monitor academic standards, all higher education institutions will be subjected to a cycle of accreditation and validation. The performance of Area Study Centres, Pakistan Study Centres and Centres of Excellence will be reviewed, and new centres of advanced studies in modern disciplines of science and technology will be established. Linkages of universities with industry and R and D organizations will be promoted.

9.3 STRATEGY

- 9.3.1 Science and engineering laboratories in universities and colleges shall be strengthened through increased inputs of modern sophisticated equipment and manpower trained in modern disciplines of science and technology.
- 9.3.2 *More liberal grants shall be provided for books and journals.*
- 9.3.3 Information retrieval centres shall be established in all the universities linked with the UGC.
- 9.3.4 Special funds shall be allocated for research.
- 9.3.5 Many university departments shall be raised to centres of advanced studies in new disciplines.
- 9.3.6 Linkages of good university departments with international institutions will be established.

- 9.3.7 The performance of Area Study Centres, Pakistan Study Centres, and Centres of Excellence shall be reviewed and new inputs will be provided, where needed, in order to speed up M.Phil. and Ph.D. programmes.
- 9.3.8 Centres of research on problems related to community development will be established in the universities.
- 9.3.9 The restriction of No Objection Certificate will be lifted for participation of teachers in international conferences.
- 9.3.10 More funds shall be allocated for supporting the participation of university researchers in international conferences.
- 9.3.11 Liberal funds shall be provided for holding national and international seminars, conferences and workshops in important disciplines of social sciences, natural sciences, and technology.
- 9.3.12 Professional associations in various disciplines shall be encouraged and given substantial financial support for holding professional conferences and for publication of research journals.
- 9.3.13 Those researchers who generate information and processes for the development of new technology, shall be appropriately rewarded.
- 9.3.14 The library at Quaid-i-Azam University will be raised to national library of science and technology.
- 9.3.15 Provinces will be encouraged to set up institutes of high science and technology.
- 9.3.16 Sizeable endowments will be progressively provided to the universities to enable them to achieve financial self-sufficiency and financial autonomy.
- 9.3.17 Competitive grants will be provided to research institutions doing high quality basic and applied research.
- 9.3.18 The university Acts shall be revised and appropriate changes shall be made to ensure efficient management of the universities. All university administrators will be required to undertake training in management of higher education.
- 9.3.19 The research fund placed at the disposal of the National Scientific Research and Development Board (NSRDB) by the government shall be gainfully used for promoting research related to economic development of the country. For this purpose, higher education research policy will be formulated.
- 9.3.20 All curricula will be modernized in order to accommodate new knowledge and new disciplines.

- 9.3.21 The Act of the UGC will be amended to facilitate its role in raising the academic standards in institutions of higher education, and in the financial management of universities.
- 9.3.22 University teachers doing research and producing M.Phil. and Ph.D. students will be granted research allowance.
- 9.3.23 Universities may offer a package of incentives in the form of better salaries and research grants to highly qualified teachers, if appointed on contract basis, for the advancement of new and emerging disciplines of science and technology.
- 9.3.24 The teachers shall be subjected to a strict regimen of accountability through performance evaluation, on the basis of which rewards and punishments will be awarded by review boards established for the purpose.
- 9.3.25 The degree level education will be restructured and diversified. The diversification will be aimed at introducing such courses in a three-year honour's degree programme which may enhance employability of students.
- 9.3.26 A separate Funding Council for Colleges (FCC) may be set up in each Province.
- 9.3.27 A National Council of Academic Awards and Accreditation may be established to regulate the academic affairs of such institutions in the private and public sectors which are given degree-awarding status.
- 9.3.28 The feasibility of setting up Provincial Councils of Academic Awards and Accreditation (PCAAA) in each Province for colleges working under autonomous management boards may be undertaken.
- 9.3.29 Special programmes will be launched to promote the entrepreneurial role of the university. A committee comprising industrialists and educationists will be set up to prepare a plan for enhancing industry-university relationship.
- 9.3.30 Science Parks will be set up in selected universities for the development of industrial process jointly by the private sector and universities.
- 9.3.31 The principle of zero-based budgeting will be introduced by the UGC in allocation of funds to departments and institutes in the universities.
- 9.3.32 A ten-year programme for higher education development will be prepared by the UGC in collaboration with universities, keeping in view the manpower needs for a growing industrial base in areas of high science and technology.
- 9.3.33 Community development centres will be established in each university. A full feasibility study on this aspect will be undertaken by the UGC in consultation with Vice-Chancellors.

Education for all

- 9.3.34 Twenty new universities, four in the Public Sector and 16 in the Private Sector will be opened to meet the rising demand for higher education.
- 9.3.35 In consultation with study groups, steps will be taken to introduce measures for improving the internal efficiency of the system.
- 9.3.36 Competitive grants will be provided to institutions demonstrating high level of external efficiency.

10 Development of Social Sciences

10.1 BACKGROUND

- 10.1.1 Historically, the development of Natural Sciences has preceded the development of Social Sciences. More recently, however, in this period of convulsive change, even the objective of sociological enquiry is passing through a major transformation. Nuclear energy, rockets, wonder drugs, latest surgical techniques and computers affect society in important ways. So alarming are these changes and so intriguing their effect that, as has been described in sociological jargon, "No one will live in the world in which he was born, and no one will die in the world in which he worked in his maturity". This signals a challenge for the social scientists, albeit, differently for nations who follow the western life style, and nations who are members of the Muslim Ummah.
- 10.1.2 Interestingly enough, science and technology are not 'value neutral'. In fact, "science and technology serve to bring about changes in institutions, and individual life styles; they generate strains for our values and belief systems and they create problems and opportunities for our economic and political organisations". It is therefore of utmost importance that advancement in science and technology is viewed in conjunction with population growth and contemporary social change. The argument that the western society has developed successful social indicators to assess the impact of science and technology is not sufficient.
- 10.1.3 Perhaps, notwithstanding the success of such indicators as, for example, productivity, employment, inflation, expenditure, investment, consumption and income distribution, there are other types of indicators which need be kept in view, in the developing countries in general and Muslim countries in particular. The latter are purely value-laden and should find their expression in the process of development of cultural and religious thought in parallel with advancement of science and technology. The western life style which has accompanied the modern scientific and technological revolution and, in fact, the scientific and technological worldview, cannot be regarded as a touchstone for measuring advancement of cultural, social, and religious values amongst the Muslim Nations. If anything, the life styles of the two categories are based on entirely different ethos; one depending on the material and mundane alone based on man-created laws, and the other on both the spiritual and mundane regulated by the teachings of the Quran and Sunnah, which, in their all pervasive meaning, are sympathetic to advancement of all types of knowledge. "If then, a person does not obtain the knowledge of quantity and quality he will lack knowledge of the primary and secondary substances, so that one cannot expect him to have any knowledge of the human sciences which are acquired by man through research, effort and industry" (Al-Kindi). It is this context which brings out the importance of social sciences, and which calls for a different type of orientation of social scientists in the Muslim World; the western social theory be as it may.

- 10.1.4 Not only has there been a general neglect in teaching and research in social sciences, almost at all levels of education, but also, compared to natural sciences, the effort needed to train high quality manpower in vital disciplines of social sciences has remained minimal. In view of the manifold importance of social sciences, a renewed effort is required to reconstruct the fabric of social sciences in curricular content, in textual material, in teaching methodology, and in research. This is a difficult task. This requires new and creative approaches. This calls for establishing new institutions equipped with modern analytical tools. This warrants the preparation of a breed of social scientists who could create new milestones for the advancement of Islamic Social Sciences, which could be used for solving the problems of ethnicity, crime, drug abuse, national identity, poverty, economic structures, morality, ethics, freedom of intellectual thought, social justice, and within the ambit of all this, the Islamization of education. This is not all. These technological advancements which have changed human ecology with an unprecedented fervent in the last few decades and which will continue to do so in the next century, can neither be ignored nor by-passed. Rather, it is the social scientist who has to show his mettle for maximizing the use of science and technology, without letting the society sacrifice its ethos.
- 10.1.5 The Policy has perceived the challenges in the development of social sciences within the perspective of the issues described in the preceding paragraphs and enunciates principles which may lead to the rapid growth of these sciences in manpower development, teaching and research. The implementation of the proposed Policy parameters will hopefully usher in a new era for the preservation of Islamic ethos in scientifically and technologically oriented Pakistani society.

10.2 POLICY STATEMENT

- 10.2.1 Social Sciences will be given the same importance as Natural Sciences for developing manpower, improving the quality of teaching, and advancement of research. Research in Islamic Social Sciences and methodology of their teaching at various levels of education will be undertaken on priority basis. The infrastructure of social sciences research will be expanded as a part of the university system. Information Retrieval System will be introduced for a facilitated flow of new information to university teachers and researchers. Modern disciplines of social sciences as Centres of Advanced Studies will be established in the universities. Social sciences research will be undertaken for use in obviating ethnic differences, parochialism, crime, poverty, and the negative impacts of science and technology. Central Asian Studies will receive a special treatment in

the overall development of social sciences. National Awards will be instituted for creative social scientists.

10.3 STRATEGY

- 10.3.1 A separate training scheme will be instituted for developing high-quality manpower in social sciences.
- 10.3.2 Centres of advanced studies will be opened in the universities and institutes of education in vital areas of social sciences.
- 10.3.3 Islamic Social Sciences will be developed as a special subject. A separate Institute of Islamic Social Sciences will be established for teaching and research.
- 10.3.4 Institutes of Social Sciences, one in each Province and one at the Federal level, will be opened to undertake research on vital problems relevant to social needs of the country.
- 10.3.5 A National Council of Social Sciences will be established to collect and collate data, and undertake studies on social problems. The Council will also coordinate the teaching and research of Social Sciences in the country.
- 10.3.6 Separate funds will be allocated from the National Scientific Research and Development Board for supporting good quality research projects in social sciences and languages.
- 10.3.7 Curriculum Research and Development Centres will be charged with the responsibility of preparing new curricula and textbooks based on the social ethos of Pakistan, for bringing about revolutionary changes in the teaching of social sciences at school and college levels.
- 10.3.8 At graduate and post-graduate levels of education, compulsory teaching of elementary mathematics, statistics, computers, and philosophy will be introduced for those majoring in social sciences subjects.
- 10.3.9 Social Sciences subjects (such as management sciences) which enhance employability of graduates, will be introduced in colleges.
- 10.3.10 Social Sciences clubs will be organised in schools and colleges under the aegis of the National Council of Social Sciences.
- 10.3.11 National Awards will be instituted for creative research in social sciences.
- 10.3.12 Area Study Centres and Pakistan Study Centres will be further strengthened, so as to

enable them to undertake Ph.D. Programmes. Programmes of Central Asian Study Centres will be expanded.

10.3.13 The National Library will be provided with more funds so that it is raised to the largest resource of social sciences material.

10.3.14 Information Retrieval System will be set up at the University Grants Commission for facilitating the flow of information to researchers.

11 Campus Violence

11.1 BACKGROUND

- 11.1.1 Much of the erosion of our educational standards in recent years has been attributed to excessive use of violence on the campuses. Free traffic of arms and ammunition on the campuses and their indiscriminate use by rival groups of students have created difficulties; the solution to this problem has gone beyond the scope of lawful authorities in colleges and universities. Anti-authority attitude, little respect for teachers, politicization of students, off-campus abetment of students by the vested interests, non-recognition of the effective role which the silent majority of students can play on the campus, inadequacy of law enforcing mechanisms, ineffectiveness of discipline committees, apathy and aloofness of teachers, cheating in examinations, soft and even benign attitude of the authorities towards politically aligned, violent groups of students, overcrowding of classrooms, lack of seriousness in imparting instruction, lack of diversification in channelizing the energies of students, for example, in sports and co-curricular activities, are some of the factors which are adversely affecting the higher education system. These trends need to be reversed with the clear objective of promoting a campus culture sympathetic to easy academic growth in an environment of peace, devotion, hardwork, creativity and common nationhood. The Policy having recognised these trends proposes a new strategy to eradicate the evil.

11.2 POLICY STATEMENT

- 11.2.1 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 counselling. Special attention will be paid to the improvement of corporate life on the campus.

11.3 STRATEGY

- 11.3.1 A dean of students affairs will 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.
- 11.3.2 Extensive guidance and counselling services will be provided through teachers for promoting the welfare of students.

- 11.3.3 Placement services will be established on each campus for providing information and guidance related to job opportunities and career planning.
- 11.3.4 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 offence. Senior teachers and administrators will be given magisterial powers.
- 11.3.5 Campus security force will be established at each campus.
- 11.3.6 No outsider will be allowed to stay in hostels. Full user charges will be realised from hostel residents.
- 11.3.7 Students' groups as political organizations will not be allowed to operate on the campus.
- 11.3.8 Teachers will be vested with powers to deal with acts of hooliganism and impose penalties on culprits without recourse to the discipline committee.
- 11.3.9 Overcrowding in the classrooms will be eliminated.
- 11.3.10 Such student clubs which could enhance academic excellence, sharpen intellectual activities and promote creativity, will be encouraged.
- 11.3.11 The laws relating to penalization of students on account of hooliganism, keeping or use of firearms, insulting the authorities or teachers, intimidating the members of university bodies, use of university property without authority and cheating in examination, will be made more stringent, effective and binding.
- 11.3.12 Sports facilities will be expanded and students will be encouraged to participate in sports and games.
- 11.3.13 All students will be assigned community work during summer vacation.
- 11.3.14 Parents bodies and alumni associations will be organized on each campus for seeking periodical advice about maintaining discipline on the campus.
- 11.3.15 Vice-chancellor will be vested with full authority to expel a student if he is not satisfied with his conduct and behaviour. No appeal will lie against the decision of the Vice-chancellor.
- 11.3.16 Democratic norms, tolerance, coexistence, mutual help, and national outlook will be promoted through inter-campus and intra-campus seminars and lectures.
- 11.3.17 All such concessions which weaken the academic programmes, will be withdrawn.
- 11.3.18 The rule of 80% attendance of classes will be strictly enforced.

12 Student Welfare

12.1 BACKGROUND

12.1.1 Learner is an active participant in the teaching-learning process. Much of the activities of the educational institutions are built around the student. As he joins the institution, he is nurtured and groomed by his contact with the teacher and ultimately leaves the *alma mater* as an enriched, enlightened and a valuable human resource. Not all students get equal opportunity to rise on the ladder of education. In a stratified society, social class and economic handicap, by and large, determine the occupational destiny of a student. In a system which attempts to provide equal opportunity and equal access to education, merit and ability are supported by liberal grants in the form of scholarships, freeships, and fellowships. Additionally, within the educational institutions the learner, apart from academic opportunity and scholarly pursuits, is enabled to develop leadership qualities in a number of extra-curricular areas. A student is progressively moulded into a cast, after which he joins the society in a life-long earning pursuit. Traditionally, the State and the institutions on behalf of the State have a responsibility to look after the welfare of students. The transport of students to and from the institution, their stay in hostels, the scholarships or tuition fee concessions they receive, the places for their recreation, the cafeterias offering subsidized food, and their health care are the usual welfare norms adopted by the institutions. The progress made in this regard is substantial, yet, in a number of areas neither the welfare tasks are standardized, nor do they fulfil the real needs of students. Apparently, in many institutions, inadequacies emerge as irritants. Unfortunately, neither the students' guidance and counselling nor the students' welfare programmes are institutionalized. A number of new initiatives are therefore needed for improving the students' welfare programmes in educational institutions.

12.2 POLICY STATEMENT

12.2.1 The welfare of students will be given the priority it deserves. Financial inputs will be made into educational institutions for improving the facilities needed for the welfare of students. Liberal scholarships will be provided for indigent students, especially those from the rural areas, enabling them to remain in the educational stream according to their abilities and intellectual development. Educational institutions will be democratized, to enable the students to develop leadership qualities, and work for facilitating the growth of their personalities. Ample opportunities will be provided to able and outstanding students for advanced studies within Pakistan and abroad. Arrangements will be made for guidance and counselling of students for looking after their welfare, and for the promotion of their recreational activities. Guidance and counselling will be programmed to inculcate high qualities of conduct and character as dictated by Islamic ethos. In

sports activities and other extra-curricular activities, inter-institutional exchange of students will be promoted. Hostel places will be further increased. Teachers will be made to spend more time with students outside the class for removing their academic difficulties. Students will be encouraged to promote and develop a healthy, disciplined atmosphere in educational institutions. Placement services will be established on each campus.

12.3 STRATEGY

- 12.3.1 Standard facilities for transport, health care, cafeteria, recreation, games, sports, debates, cultural shows and exhibition of arts and sciences among others, will be provided in colleges and universities.
- 12.3.2 The number of indigent merit scholarships shall be substantially increased.
- 12.3.3 Talent farming scholarships, and scholarships for advanced studies shall be widely distributed.
- 12.3.4 Special scholarship programmes shall be initiated for students from rural areas.
- 12.3.5 Students shall be supported for participation in international youth programmes and in national and international science exhibitions of creative works.
- 12.3.6 Literary and scientific societies organized by students in various disciplines shall be funded through matching grants.
- 12.3.7 Grants-in-aid shall also be provided for literary and scientific magazines of students.
- 12.3.8 Special funds shall be provided for frequent inter-provincial exchange of students.
- 12.3.9 Compulsory tutorial system shall be introduced.
- 12.3.10 The union activities shall be regulated in a free and democratic manner.
- 12.3.11 Guidance, counselling and placement services shall be provided in the institutions.
- 12.3.12 Condition of residence halls will be considerably improved and more hostel places will be created.
- 12.3.13 Youth hostels will be established at important locations in the country.
- 12.3.14 Training programmes of teachers will include the component of guidance and counselling so as to enable them to use this mechanism for moulding the conduct and character of

students in accordance with the moral and spiritual values of Islam. Those students who present exemplary conduct in this regard, will be appropriately rewarded.

- 12.3.15 The Dean of Students Affairs who will also be the Ombudsman, will regulate the welfare activities of the students.
- 12.3.16 Special awards (medals, certificates, cash) will be given to students demonstrating exceptional creative abilities.
- 12.3.17 'Open Days' will be organized by students for parents, general public and for prospective students likely to study for higher education.
- 12.3.18 Student-teacher centres will be established on all campuses.

13 National Service

13.1 BACKGROUND

13.1.1 One of the purposes of education is to prepare a student for responsible life in society. In a developing country where poverty is widespread, and problems of health, clean living and societal uplift assume large proportions, it is necessary that the educated members of the society not only realise these problems but also participate in a systematic manner for the eradication of these problems. Our education system, contrary to the teachings of Islam, is not geared to impart training of the type which could make the students realise these problems, or enable them to participate in the process of positive societal growth. In their present form and set up, our educational institutions are quarantined from the communities around. The present system of training the higher secondary students under the National Cadet Corps (NCC) is available only to a limited number of students concentrated in the cities. A vast population of students living in the villages remains unattended. Also, the whole process is of limited use for girls. There are therefore obvious reasons that the whole range of students from secondary to university level are exposed to community problems and community service in periods of time when they are comparatively free from their academic pursuits.

13.1.2 The community service can take several forms depending upon the locale of the community. The present Policy therefore proposes to institutionalize the process of community service and suggests that students, apart from the academic preparation, may be compulsorily involved in a variety of tasks for the improvement and betterment of local communities. The compulsory community service may be rewarded with the same volume of marks and the advantage thereof which is granted to the NCC.

13.2 POLICY STATEMENT

13.2.1 Rendering of compulsory 'Community Service' by each student will be made a part of curriculum at each level of education. Compulsory community service will be enforced through Provincial and Federal legislation. The process will be institutionalized so as to break the barrier between the communities and educational institutions, and to enable the students to perform various tasks leading to the uplift of the community. The universities will be called upon to play a major role in solving the problems of the community.

13.3 STRATEGY

13.3.1 Each university will set up a community development centre which will prepare plans for:

13.3.1.1 identifying the problems of the community;

- 13.3.1.2 interaction between the university and community;
- 13.3.1.3 projecting the problems and seeking assistance from the academic community for their solution; and
- 13.3.1.4 assigning college and university students, individually or in groups, to community service.
- 13.3.2 The community development centre of the university will organize a network of community development units in the colleges under the control of the university.
- 13.3.3 The schools shall organize similar community service programmes with the help and assistance from community development units or the community development centres.
- 13.3.4 The identification of social service tasks, the period to be spent on community service, the satisfactory completion of the service and the incentive to be given will be prescribed by universities and other educational institutions through regulations.
- 13.3.5 The UGC will prepare an implementable plan for this purpose in consultation with the Vice-Chancellors and experts on the subject.

14 Media in Education

14.1 BACKGROUND

- 14.1.1** Demand for education is increasing rapidly. The clientele for education is spread across the country over urban and rural areas and in difficult terrains with a low literacy rate, a low participation rate and rapidly increasing population. Innovative methods are needed to distribute the benefits of education to the masses. The non-governmental organizations are being provided incentives to launch functional literacy programmes. Two initiatives are necessary for expanding the horizons of education in Pakistan without which substantial success in the education of masses does not seem feasible. First, the use of media (electronic and print) should be maximized; second, educational technology should be institutionalized to the extent that all types of educational materials could be prepared with professional ease, for dissemination through the non-formal sector and for enrichment of educational process in the formal sector.
- 14.1.2** The future of Pakistan's educational development will be determined as to how effectively we are able to use the electronic and print media for the benefit of those who need to be educated and for increasing the pool of common knowledge in the nation as a whole. The Policy recognizing these needs, proposes several initiatives which should go a long way in bringing education to the door steps of the underprivileged and deprived population.

14.2 POLICY STATEMENT

- 14.2.1** Educational technology will be institutionalized for spreading the benefits of education to the masses in the non-formal and formal sectors of education. The media would be used extensively to provide relevant education to various population groups, namely, school age children, out-of-school youth and adults, rural females, teachers, and educated unemployed wishing to acquire employable skills.

14.3 STRATEGY

- 14.3.1** The electronic media input will form a part of a systematic multi-media approach including print materials.
- 14.3.2** Appropriate commitment in the policies of Pakistan Broadcasting Corporation (PBC) and Pakistan Television (PTV) giving necessary weightage and time to the production and transmission of the education broadcast will be obtained.
- 14.3.3** In the field of informal learning, more attention will be paid to the effective inclusion of

educational messages in the general programmes.

- 14.3.4 The media will be used to provide pre-service and continuous in-service training to teachers at various levels. Radio and television will be used to provide literacy and functional educational programmes to rural females and other categories of adult learners.
- 14.3.5 Special programmes for science, based on school curricula, will be telecast for school age children.
- 14.3.6 Suitable arrangements at the receiving end, for example, provision of radio/television, its availability to viewers, its proper maintenance, etc., will be made.
- 14.3.7 A combination of broadcasts and cassettes related to the teaching of science, medicine, and technology at the tertiary level including (a) video cassettes of the best tertiary teaching talents especially in science subjects for distribution among universities and colleges, (b) late-night broadcast lectures of eminent professors in identified and selected subject areas, and (c) special enrichment programmes broadcast on new scientific disciplines not yet generally included in university syllabuses such as genetic engineering, superconductivity, fibre-glass optics, ceramic engineering, particularly catering for advanced students as well as educationists, planners, decision makers, and the educated general public, will be made easily accessible to learners.
- 14.3.8 The present facilities at the Allama Iqbal Open University will be upgraded to the level of an institute of communication education.
- 14.3.9 The use of second channel will be maximized for educational purposes.

15 Funding and Resource Generation

15.1 BACKGROUND

15.1.1 In resource allocation, education has not received the priority it deserved. As a percentage of budget, the allocations have ranged between 4.8 and 7.6. As a percentage of GNP it stood at 2.15 in 1991. This makes Pakistan second lowest among 28 countries of Asia and the Pacific. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has recommended an allocation of 20% of the budget or 4.4% of GNP for education in a developing Asian country. The Iqra surcharge of 5% has been levied since 1985. However, the fund formally remains to be created as a separate entity for educational expenditure. The return from users of education is no more than 5% at the secondary level and 1.5% at the higher secondary and university levels. For a long period, the share of private sector in financing education has remained minimal; and in most cases the investment has been made in urban areas. Besides, there have always been shortfalls in the amounts allocated to education and the amounts actually made available as, for example, in the Fifth and Sixth Plans. The procedures for the release of funds are cumbersome. The shortfall in local resource is supplemented through foreign assistance. The utilization of foreign assistance has not always been compatible with national priorities. Massive financial inputs are needed if such tasks as universal primary education, expansion of technical and vocational education, improvement of quality of public instruction, equalization of educational opportunity, and advancement of scientific and technological research in the universities, are to be completed.

15.2 POLICY STATEMENT

15.2.1 Education will be considered as investment of highest national priority. Allocation of funds for education will be increased substantially. Reforms will be introduced in the procedure for allocation and release of funds. Volume of funds for scientific and technological research in the universities shall be increased. The fee structure and other user charges will be rationalized. The institutions of higher education will be encouraged to generate additional resources through their own efforts. Incentives will be provided to the private sector inviting their participation in educational development. However, the affairs of the private institutions shall be appropriately regulated. Foreign assistance shall be used only for those projects which conform to national priorities.

15.3 STRATEGY

15.3.1 Public Sector

15.3.1.1 A substantial GNP allocation shall be made for the implementation of the programmes

and targets set in the Policy.

- 15.3.1.2 The allocation shall be non-lapsable, exempted from wayward financial cuts, and placed in the Personal Ledger Account.
- 15.3.1.3 The allocation shall be fully protected by a specific provision in the Finance Act.
- 15.3.1.4 The release procedure shall be simplified. The budgeted amounts shall be released expeditiously so as to ensure its utilization during the year. The authority to reappropriate funds shall be delegated to the Principal Accounting Officers.
- 15.3.1.5 A separate provision of 5% for research provided in the budget allocation of the universities will not be reappropriated for any other purpose.
- 15.3.1.6 A ratio of 60:40 between salaries and non-salaries shall be built into the budget allocation of the universities.
- 15.3.1.7 Except for unavoidable circumstances, M.Phil. and Ph.D. studies shall be pursued within the country.
- 15.3.1.8 Import of educational equipment shall remain exempted from all types of taxes.
- 15.3.1.9 Progress of the projects in terms of implementation of the objectives of the projects will be regularly monitored. Each project will be evaluated professionally before committing to the recurring side.
- 15.3.2 **Resource Generation**
 - 15.3.2.1 The scope of financial levy for the education of workers' children will be extended and the receipts on account of the Act already in vogue will be fully utilized.
 - 15.3.2.2 Local Bodies will take steps to generate resources exclusively for educational development in the area.
 - 15.3.2.3 Fee structure and user charges at the secondary and post-secondary levels shall be revised and rationalized.
 - 15.3.2.4 Institutions of higher learning shall be specially encouraged to raise funds through improved use of their assets.
 - 15.3.2.5 Portions of Ushr and Zakat accumulations shall be used for educational purposes.
 - 15.3.2.6 In urban areas, double shift shall be introduced in pre-university level institutions.
 - 15.3.2.7 In rural areas, primary and secondary schools shall be used for literacy and skill training programmes.

15.3.2.8 Iqra surcharge as an additional resource will appropriately be utilized for special educational development programmes of the government. It will be exclusively used for educational purposes.

15.3.3 Private Sector

15.3.3.1 A reasonable Tax rebate shall be granted on the expenditure incurred on the setting up of educational facilities by the private sector.

15.3.3.2 Grants-in-aid for specific purposes shall be provided to private institutions; setting up of private technical institutions shall be encouraged.

15.3.3.3 Matching grants shall be provided for setting up educational institutions by the private sector in the rural areas or poor urban areas, and for this purpose Education Foundations will be set up in each Province and at the national level.

15.3.3.4 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.

15.3.3.5 Liberal loan facility will be provided to private educational institutions by financial institutions.

15.3.4 Foreign Assistance

15.3.4.1 Foreign assistance shall be used only for projects which conform to national priorities in education; an efficient utilization of the aid shall be conditioned with effective monitoring and evaluation.

16 Privatization of Education

16.1 BACKGROUND

- 16.1.1 Participation of the Private Sector in educational development in Pakistan has a long and chequered history. After 1947 and till 1971, the Private Sector contribution expanded considerably through a variety of non-governmental organisations. In 1991, the Public to Private Sector ratio has been estimated at 70:30. Had this trend continued, this ratio could easily touch the 50:50 mark. Though the Private Sector contribution was essentially restricted to school education, yet, over the period, it started gaining access to technical and vocational education, and degree level education as well. In the corresponding period in some other countries with free economy, the Private Sector contribution created a visible impact on educational development. In Philippines, for example, 90% of higher education is supported by Private Finance.
- 16.1.2 Unfortunately, the Nationalisation Process of the People's Government when all private institutions were acquired by the Government completely eliminated the Private Sector from education. The shimmers of this retrograde step continue to bedevil our educational plans. The re-enactment of legislations in the Provinces for attracting public finance have so far produced only marginal results. Much of the Private Sector effort is directed towards money earning devices, at least, at the primary and secondary levels, in the form of pseudo-elite English Medium Schools with high fee structure in the well-to-do urban locales. At present the share of private schools stands at about 7000 institutions, mostly primary schools. In essence, the private finance in education has not helped the urban or the rural poor to the needed extent.
- 16.1.3 This be so, the social responsibility of the Government to educate its masses cannot be overemphasised. The economics of education is such that compared to physical capital, investment in human capital formation can yield high rates of return. For instance, investment in primary education has been shown to yield a return of upto 30%, notwithstanding the social rate of return.
- 16.1.4 Whereas, in general, the investment of Private Sector in development and management of institutions is considered efficient by several standards, the use of public fund invested on educational institutions, has, by and large, failed to provide a favourable cost-benefit ratio. Thus, mere increase of public finance for educational system may not be the only answer. The entropy of the system has to be reduced. This should be done by developing a viable partnership with the Private Sector in educational development.
- 16.1.5 The most difficult tasks which have evaded the achievement of desired goals, are (a) universal primary education, and (b) increase in literacy ratio to a respectable level. These are the areas which require revolutionary changes, which somehow have evaded the previous policies. It is in these two areas that a major thrust is required for spending public

- development funds in collaboration with the private sector devolving down to the level of local communities.
- 16.1.6 Even the disinvestment of public institutions in which the inefficiencies are high and which are not turning out products of acceptable quality, needs serious consideration. Further, the participation of the community and its involvement in the educational process must be promoted if an efficient growth and management of educational system is to be ensured. This is possible at all rungs of education and must be planned effectively and pursued with enthusiasm.
- 16.1.7 The Policy after an extensive debate on this issue, is presenting revolutionary steps in which, apart from using innovative means for attracting private finance, the primary sector infrastructure and preparation and implementation of plans for eradicating illiteracy will be undertaken in collaboration with local communities.

16.2 POLICY STATEMENT

- 16.2.1 New incentives will be provided to Private Sector for participation in educational development at all levels. A liberal and simplified policy will be adopted to enable the Private Sector, especially, the philanthropic organisations to undertake the task of educational development with facility and ease. The major thrust of private participation will be directed towards the rural areas and women education for accelerating the pace of educational development in the primary sector, literacy, and technical and vocational education. A system of matching grants and loans will be devised to provide financial support to Private Sector organisations. Education equipment industry, with a back up of technology transfer to be provided by the Government, will be completely shifted to the Private Sector and tangible incentives will be provided for the same. Local communities at the village level will be involved in developing, managing and supervising elementary education through public funds. A scheme for progressive disinvestment of higher education institutions will be introduced. The rights and privileges of private organisations running educational institutions will be protected through legislation.

16.3 STRATEGY

- 16.3.1 Education Foundations will be established at the Federal level and one in each Province to provide grants and loans to authentic private sector organisations which will undertake the task of educational development. The Federal Ministry of Education will develop a

- strong mechanism for monitoring the activities launched by the Foundations.
- 16.3.2 Special financial equity in the form of matching grants will be provided to those non-governmental organisations who undertake the development of functional literacy programmes, primary education, secondary education, and technical and vocational education for females in the underdeveloped rural areas.
- 16.3.3 Henceforth, all public funds for development of primary schools will be utilised through the local village committees who will also be made responsible for the management and supervision of the schools.
- 16.3.4 Any literacy plan launched by the Provinces and the Federal Government will be guided by the same village committees managing and supervising schools in the respective areas.
- 16.3.5 Law pertaining to setting up degree-awarding higher education institutions and specialised institutes, will be liberalised. The institutions so established will be placed under the National Council of Academic Awards and Accreditation for regulating academic programmes and award of degrees.
- 16.3.6 The private sector institutions will be allowed to collaborate with international institutions of repute for achieving common academic objectives.
- 16.3.7 The NCAAA will launch a separate scholarship scheme for the talented who are selected for studies in private institutions.
- 16.3.8 In a phased manner and through a set of proposals to be agreed to by the Provincial and Federal Governments, selected higher education institutions will be disinvested and passed on to the Private Sector.
- 16.3.9 Educational institutions to be set up in the Private Sector will be provided (a) interest-free loans from the banks, (b) plots in residential schemes on reserve prices, and (c) rebate on income tax, like industry.
- 16.3.10 Private enterprises embarking upon the manufacture of school, college and university equipment will be provided technical know-how and prototypes by the National Education Equipment Centre (NEEC). The Education Foundations and Banks may also provide grants or loans for this purpose.
- 16.3.11 Science Parks for private entrepreneurs will be established in the universities so that the Private Sector could make use of the knowledge generated by the university scientists for problem solving as well as for use in the development of new technologies.

17 Education Industry

17.1 BACKGROUND

- 17.1.1** Educational process depends on a number of inputs. These include buildings, furniture, playgrounds, laboratories, laboratory equipment and teaching aids. The process is best facilitated if the educational materials are indigenously produced. Only a limited progress has been made in this regard. On the equipment side, the National Education Equipment Centre launched the primary education kit several years ago. It is now in the process of developing science kit for classes VI-VIII. The Centre has also produced prototypes of a number of higher secondary level science equipment. Almost all equipment for higher education is imported from abroad. The technical know-how for the maintenance of sophisticated equipment is negligible. There is no industrial unit in the country for the production of laboratory glassware and science equipment. Also, the industrial base for production of chemicals used in teaching and research is non-existent. Teaching aids like overhead projectors, slide projectors, charts and models are frequently imported from foreign countries. The process of science education in particular is stalled because of the prohibitive costs of imported materials. It is time that measures are taken to promote the development of education industry in the country. Availability of indigenously produced educational materials will lessen the cost of investment on education.

17.2 POLICY STATEMENT

- 17.2.1** Arrangements will be made for encouraging the development of education industry, especially the school level equipment, chemicals and glassware, learning materials, models, charts, educational toys, and laboratory furniture in the private sector. Funds shall be provided for developing prototypes of equipment, educational toys, educational kits, plastic models and charts. The know-how developed after appropriate research will be passed on to the private entrepreneur. Modern technology will be acquired for the production of sophisticated parts of scientific equipment. Special funds will be allocated for research on development of science equipment.

17.3 STRATEGY

- 17.3.1** The National Educational Equipment Centre shall be further strengthened to undertake research on equipment development in accordance with the needs of secondary school curricula.
- 17.3.2** The Centre shall maintain a technology transfer unit for passing on information to the Private Sector and enabling this sector to set up industrial units for equipment production.

- 17.3.3 The equipment industry shall be given protection by banning the import of all those equipment and kits which are produced locally.
- 17.3.4 The National Educational Equipment Centre shall immediately undertake the preparation and testing of science kits for middle schools.
- 17.3.5 Setting up of education industry in the Private Sector shall be placed on high priority for the purpose of loans from financial institutions.
- 17.3.6 The NEEC shall be linked with advanced equipment production units in foreign countries.
- 17.3.7 The NEEC personnel shall be sent abroad for training in equipment engineering, plastic modelling, glassware production, laboratory furniture production, and development of educational toys.
- 17.3.8 Institute for the Promotion of Science Education and Training shall provide the professional backing for the types of equipment needed, and for the testing of the equipment produced.

18 Administration and Management of Education

18.1 BACKGROUND

- 18.1.1** Many of our failures in the past had been less owing to resource scarcity than to the administrative and managerial inadequacies. The management of education requires a special type of professional expertise. Not many of our educational managers are trained in this art. Furthermore, the existing administrative norms do not allow for the participation of the community in the management of educational institutions at the local level. Till recently, the training of educational administrators was only a casual process. However, with the establishment of the Academy of Educational Planning and Management (AEPM), institutional framework has been provided for the training of administrators at all levels of education. This needs to be expanded further. Substantial changes are required to be made in the administration of education to improve the efficiency of the system.

18.2 POLICY STATEMENT

- 18.2.1** The managerial and administrative skills of educational personnel will be improved through professional training in techniques and methods of educational administration. The process of decision-making will be decentralized. Educational development plans shall be effectively coordinated and monitored. Management of district level education will be improved by associating the local community. The Academy of Educational Planning and Management will be further strengthened to enable it to expand its training programmes and extend it to the Provinces.

18.3 STRATEGY

- 18.3.1** Separate Directorates of Primary Education shall be established.
- 18.3.2** School Management Committees shall be constituted at the village, settlement and institution levels.
- 18.3.3** There shall be a headmaster appointed in a higher grade in each primary school who will, in addition to supervisory work, be required to teach.
- 18.3.4** Not more than 15 schools shall be allocated to each supervisor. The mobility of the supervisory staff will be enhanced.
- 18.3.5** The number of Directorates of Technical Education may be increased.
- 18.3.6** A system of accountability and rewards based on performance evaluation of teachers

and heads of institutions will be developed.

- 18.3.7 Directorates of Colleges may be established at the divisional level in each Province.
- 18.3.8 Existing education code will be revised in order to provide more financial and administrative powers to the heads of institution and directors. In case of higher education institutions financial and administrative powers will be devolved to the level of deans, chairmen and directors.
- 18.3.9 A code of ethics for teachers and administrators shall be developed and followed strictly.
- 18.3.10 Financial rules shall be revised and effective and simple procedures shall be devised for expenditure under different heads of account.
- 18.3.11 All supervisors, headmasters and principals shall receive training in techniques and methods of educational administration and financial rules before appointment.
- 18.3.12 A manual describing the principles of educational administration and financial management shall be prepared.
- 18.3.13 Training programmes shall emphasize management skills through the principles of management by objective.
- 18.3.14 Administrative posts shall invariably be filled with those who are professionally qualified.
- 18.3.15 The district education officer shall be delegated appropriate financial, administrative and personnel management powers.
- 18.3.16 The Provincial Governments may establish Academies of Educational Planning and Management.

19 Education Cadre

19.1 BACKGROUND

19.1.1 Pakistan is building up a vast reservoir of knowledge and expertise in educational institutions. However, these highly talented individuals neither receive the social status they deserve, nor do they get ample opportunities of career enhancement to high positions in administration. In the present state, whereas high quality manpower is available in the universities and colleges, there are few avenues to utilize their expertise in government organizations. Many of our universities and college teachers reach a moribund situation with no further chances of career enhancement. This paradox is depriving the government of enlightened input and at the same time breeding dissatisfaction amongst the able and qualified teachers. The present Policy recognizing the importance of utilizing the knowledge and expertise of university and college teachers, proposes to set up an 'education cadre' from which able and talented persons may be drawn for appointment to high positions in education and non-education government departments and autonomous organizations.

19.2 POLICY STATEMENT

19.2.1 An 'education cadre' of highly qualified and talented educationists will be set up. The members of the cadre will enjoy the same prestige and privilege as any other cadre. Henceforth, all top positions in education departments and relevant autonomous and semi-autonomous organizations will be manned by the members of the education cadre. The expertise of the members of the cadre will also be used for senior positions in other government departments.

19.3 STRATEGY

- 19.3.1** Provincial and Federal Education Cadres will be constituted through appropriate legislation.
- 19.3.2** Only teachers from educational institutions will be included in the cadre through a procedure to be laid down by a Provincial Government or the Federal Government as the case may be.
- 19.3.3** The strength of the cadre will be determined after detailed exercise to be undertaken in each Province.
- 19.3.4** An equitable opportunity will be provided to members of the education cadre for appointments in senior positions in the government.
- 19.3.5** A procedure will be set up for promotion of members to the highest grade while remaining

in the cadre, and irrespective of their movement from the position they occupy in an educational institution. The pay scales as may be awarded, shall carry all prerequisites available to government employees in the Provincial or Federal secretariats.

20 Manpower Planning and Education

20.1 BACKGROUND

- 20.1.1** Notwithstanding the general benefits of education, the gainful employment of educated manpower is an important aspect of the overall development of the society. The type of general education imparted to the bulk of our youth is not suitable for the job market. Nor would it be helpful in future because of the changing pattern of economic activity. For this reason, change in curricula which could make them compatible with market needs, is an essential part of educational development. More so, the production of manpower should be related with appropriate manpower forecasting, that is, the type of work force required and the type and level of skills in which proficiency is to be achieved. This process has so far not been institutionalized. In general, it should be the aim of education, to enable the youth to earn an honourable living for themselves and also contribute to the overall development of the country. For the growth and grooming of manpower in the given socio-economic context and for achieving a rational balance between the future requirements and supply, an institutionalized framework has to be set up.
- 20.1.2** Existing data indicate an open unemployment of 4% (903,000). Half of these are illiterate. The remaining half are literate: below Matric (144,000), above Matric but less than Degree (64,000), and Degree plus Post-graduate (35,000). The percentage of unemployment is more in the rural areas than in the urban areas. In view of the present trend of education, unemployment is likely to rise to 300,000. In the absence of any reliable data on manpower forecasting and the development of job market, it is essential that education is oriented towards the employability of the youth.

20.2 POLICY STATEMENT

- 20.2.1** Such changes will be introduced in education which will enable the young to earn an honourable living for themselves, and contribute to the development of the country. Through changes in the curricula, school education will be further vocationalized with such disciplines which could improve skill acquisition by the work force according to market needs. Semi-literate and school drop-outs will be given the opportunity of upgrading their skills through functional literacy and through distance education in the non-formal sector programmes. New inputs will be made to expand the facilities of technical and vocational education of the rural youth. Manpower planning and manpower forecasting will be institutionalized. A parallel stream of vocational high schools will be initiated with concentration in semi-urban and rural areas. General education at degree level will be diversified.

20.3 STRATEGY

- 20.3.1 Facilities inclusive of loans shall be provided to enable trained persons to start small business.
- 20.3.2 Central vocational training facilities shall be provided for groups of schools in the urban areas.
- 20.3.3 For the rural areas, mobile training workshops shall be established.
- 20.3.4 Vocationalization of secondary education shall take the form of accelerated practical training of drop-outs for entry into the labour market.
- 20.3.5 Vocationalization of secondary education shall go beyond the traditional industrial occupation and include the fields of social services, medicine, computers, tissue culture, laser technology, etc., to prepare manpower for high technology generation and transfer.
- 20.3.6 Social Sciences and Linguistics shall receive due emphasis, since for the next decade and early 21st century employability in these areas will increase both in private and public sectors.
- 20.3.7 New occupations in the modern sectors of urban areas and non-farm occupations in rural areas shall be identified and developed from the point of view of providing gainful employment to women.
- 20.3.8 More technical and trade level courses shall be introduced in urban areas to enable the women to pursue modern trades and technologies.
- 20.3.9 Greater emphasis shall be laid on non-formal educational training in as much wide a range of skills as possible. This will ensure opportunities of developing skills in women without attending highly structured institution-based programmes. The Technical Boards will make arrangements for offering certification for the same.
- 20.3.10 Existing technical and vocational institutions shall be renovated. New vocational institutions shall be opened. There shall be at least one such institution for a town of sizeable population.
- 20.3.11 A national network of male and female vocational training centres and vocational high schools will be set up to make up for the existing vacuum.
- 20.3.12 Guidance and Counselling shall be provided at secondary level to shift a bulk of appropriate clientele to vocational and polytechnic education.
- 20.3.13 Apart from massive in-school and out-of-school vocational training programmes, efforts will also be commissioned to raise a critical array of high level scientists and technologists.

20.3.14 The Academy of Educational Planning and Management and the Manpower Institute will work together for manpower planning and labour market forecasting.

21 Computer Education

21.1 BACKGROUND

21.1.1 Since the revolution of the chip, the computers are rapidly permeating all societies. Initially designed to solve complex mathematical and scientific problems, the computer has made a remarkable entry into commercial and governmental organizations. The ease with which it can help solve the management problems and collate empirical data, has provided means for facilitating systems operations. The most interesting feature of this machine has been the lowering of its costs, with, at the same time, increased analytical power and high speed. Backed by increasingly imaginative software programmes and rapidly advancing language base, the diverse use of the computer is touching new heights. Artificial intelligence, computer simulation of human speech, computer-aided design, parallel processing, robotics, and unlimited possibilities for simplifying the designs of most complicated machines through the microchip, have made the computer a household word. To this may be added the educational uses of computer.

21.1.2 Computer literacy, computer education, and educational enrichment through computers are a part of educational curricula in the western world and some technologically advanced developing countries. Unfortunately, however, computer education has not so far been able to find a niche in our curricula. Progress in computer education and computer literacy has been limited by paucity of financial resources and trained manpower. The present Policy proposes to eliminate both the limitations. The introduction of computer education, it is hoped, would bring several types of advantages to the school going population. The spread of computer awareness, knowledge about computer applications, induction of programming skills and enrichment of the learning processes are amongst the few to be cited.

21.2 POLICY STATEMENT

21.2.1 Computer literacy and computer education will be emphasized and made a part of educational curricula at all levels. All training programmes for teachers, and educational administrators will include computer education as a compulsory component. Computer-aided instruction will be used as an important tool for enriching the teaching-learning process. Special funds will be provided for introducing computer hardware and software in schools. Science curricula will be designed so as to include computer-based creative educational activities.

21.3 STRATEGY

21.3.1 Computer education will be introduced at basic and secondary levels. At the basic level,

computer education will be based on educationally meaningful games and such activities which are compatible with the cognitive ability of the age group. Activities to be introduced at the basic level will include those which may enrich the experience of students in general science and mathematics, and enable them to understand the computer logic in solving problems. At high school level, a further exposure will be provided to operating systems, programming, and software preparation.

- 21.3.2 All technical and vocational schools as well as polytechnics will introduce computer education as a part of regular curricula.
- 21.3.3 Each school will set up a modest computer facility, along with appropriate software to which the students will have free access during the school hours.
- 21.3.4 The subject of computer science will be introduced as an optional subject at higher secondary and degree levels.
- 21.3.5 A crash programme for the training of teachers will be launched with assistance of computer science departments in the universities.
- 21.3.6 Computer education will be a compulsory component for all training programmes in the education sector.
- 21.3.7 Science departments in the universities will be provided funds for developing software relevant to school education.
- 21.3.8 Subjects like computer-aided designs (CAD), computer-aided machines (CAM), artificial intelligence, robotics and parallel processing will be introduced at post-graduate level.
- 21.3.9 All teacher training colleges and institutes will introduce computer training facilities.
- 21.3.10 Incentives in the form of matching grants will be provided to the private sector to open high quality training and research institutes in computers and electronics.
- 21.3.11 Incentives will be provided to Education Industry (Chapter 14) to produce computers for education at low cost.
- 21.3.12 The expertise which now exists in the private sector will be encouraged to produce software relevant to computer education in schools.

22 Examinations and Evaluation

22.1 BACKGROUND

- 22.1.1 Evaluation is a crucial phase in the teaching-learning process. The dynamics of education leading to the realization of specific objectives is, to a large extent, dictated by the evaluation mechanisms used. Examination reforms carried out in a number of developing countries have caused improvement in their education systems. However, in spite of high priority given to the examination system (Report of the National Commission on Education, 1959) and reforms suggested in a number of other Reports (Deakin, 1974; Helmick, 1974; Mughni, 1975; Imtiaz, 1985), our gains in improving examination system have been only marginal. The report on examination reforms (1985) makes a comprehensive analysis of the malfunction of examination systems (annual, semester) and suggests a number of remedial measures. Unfortunately, these measures have not been implemented. The result is that even today we are caught in a vicious circle. This circle begins at the badly constructed syllabi, looping through poorly written textbooks and badly conducted teaching-learning process, and ending at a rag-bag system called external evaluation. For students it is an exercise in attrition; for teachers it is a chase in futility; for parents it is bringing economic loss; and for the State it is producing manpower of unreliable quality.
- 22.1.2 The Education Policy after analyzing the previous reports and taking into consideration the persistence of malfunctioning of examinations, has proceeded to solve the problems in two ways: (a) by recommending that a National Testing Service be established (Chapter 6) which would have a positive influence on the examination system, and (b) by highlighting the reforms which must be introduced immediately for streamlining the annual examination system and restoring public confidence in the results of annual examinations.

22.2 POLICY STATEMENT

- 22.2.1 Major efforts will be directed towards improving the management and conduct of annual examinations. Reforms will be introduced for improving the management capability and, thus, the efficiency of examination departments in the Universities and Boards of Intermediate and Secondary Education. The system will be streamlined to eradicate all types of malpractices. Periodical assessment will be carried out during the academic year and will be used as a performance indicator along with the results of annual examinations.

22.3 STRATEGY

- 22.3.1 Both the annual and the semester systems will continue to co-exist.

- 22.3.2 The Examination Departments of mainstream universities are in urgent need of reorganization. Steps will therefore be taken to improve the quality of managerial skills of their personnel through training, and by rationalizing staff, space and equipment allocation. The large universities may consider setting up zones within their jurisdictions for the conduct of examinations.
- 22.3.3 The receipt and processing of examination forms shall be fully mechanized.
- 22.3.4 Private students will either be examined by the AIOU, or their examinations will be conducted independent of the regular students.
- 22.3.5 Postponement of examinations will be avoided.
- 22.3.6 The work of the Boards of Studies, the Boards of Faculties and the Academic Councils will be stringently regulated to avoid unnecessary delay in matters pertaining to syllabi.
- 22.3.7 Remuneration for paper-setters will be substantially increased.
- 22.3.8 The controllers of examination will work on a 2-3 years advanced schedule for appointment of examiners.
- 22.3.9 Senior supervisory staff will be appointed at high remuneration and will be chosen from those of proven ability, conduct and character. Remuneration for invigilators will be increased.
- 22.3.10 Rapid squads will be deployed to inspect the examination centres.
- 22.3.11 Heavy penalties will be imposed on supervisory staff as well as students found guilty of indulging in malpractices.
- 22.3.12 Sufficient powers will be given to officer incharge of examination centre to handle difficult situations, involving cognizable offence.
- 22.3.13 Examiners who fail to return their scripts in time will be heavily penalized.
- 22.3.14 The preparation and declaration of results shall be fully mechanized.
- 22.3.15 Internal evaluation will be introduced as a performance indicator along with the results of annual examinations.
- 22.3.16 All examination papers will be so organized as to include objective type questions (30 marks), short answers (40 marks), and essay type (30 marks).
- 22.3.17 All universities following the semester system will adopt a uniform grading scale as approved by the University Grants Commission.
- 22.3.18 The University Grants Commission, National Academy of Higher Education, and Boards

of Intermediate and Secondary Education will undertake research on measurement techniques and evaluation, and marking system in annual examinations.

22.3.19 The competence of students in practical examinations will be judged as far as possible through internal assessment.

22.3.20 Practical examinations will be completed before the theory examinations.

23 Education for Rural Development

23.1 BACKGROUND

- 23.1.1 Developing Asian countries, including Pakistan, are passing through a critical period. Rapid population growth (3%), illiteracy, malnutrition, environmental pollution, and economic and social disparities are some of the problems which demand solution. The problems are further compounded by the wide gaps between those living in the urban and rural areas. The rural poor who constitute an overwhelming majority of the population, are often neglected and deprived of the benefits to which they are otherwise entitled. The demographic data show that 71% of Pakistan's population lives in rural area. Despite a ratio of 1:2.5 between urban and rural populations, the health and education facilities are inequitably distributed. This places the rural population in a perpetual ordeal of malnourishment, poor health, and illiteracy, denying at the same time an honourable place in society. Also, because of little education or non-education, their potential ability for lifelong earning is eroded. The picture is even more gloomy with respect to women. As has been said by one researcher, "The concomitant of deprivation is the extensive privilege of some sections of society who possess over-riding authority for coercing other sections into submission. Deprivation thus betokens a lack of social morality in the power that governs the society". This has to be undone, and the course of social norms changed if the means are to be provided for the social mobility of the rural poor.
- 23.1.2 Education is the only means of lifting the rural poor from their present state of economic deprivation and social injustice. School is the only powerful agent of social change. Education has the property of inducing competitiveness which opens up the vistas leading to economic salvation. The education of the rural poor, therefore, cannot be relegated to a secondary place; it must receive high priority in any educational plan under the conditions prevailing in Pakistan.
- 23.1.3 Several efforts have been made in the past to reduce rural-urban disparities, and to effect rural development of the poor. The 1983 Action Plan, launched by the Ministry of Education, was a deliberate and sharply focused effort to increase the access of the rural poor to general and technical education. Even a plan for developing good quality model schools for the rural males and females has been launched. As a result, demand for education in the rural areas is rapidly increasing. However, much remains to be accomplished.
- 23.1.4 The present Policy recognizing the usefulness of the initial work done in this regard, proposes to launch a number of programmes through the formal and non-formal sectors for the educational uplift of the rural poor. These programmes will provide a sharp focus on rural populations and will be, in addition to the general provisions of spatial distribution of educational institutions, listed in various sections of the Policy.

23.2 POLICY STATEMENT

23.2.1 Education for rural development will be recognized as a priority area for (a) bridging the gap between urban and rural population in terms of access to education, quality of public instruction, social mobility and lifelong earnings, and (b) structuring basic education and functional literacy programmes so as to create awareness amongst the rural poor about their rights and privileges of existence in an egalitarian Muslim society. Substantial resources will be diverted to motivate the community for their participation in programmes of education for rural development. Education of the rural female will receive special attention. Research will be undertaken on (a) problems inhibiting the progress of education in rural areas in general, and (b) problems restricting the use of education for rural development. Health, nutrition, environmental pollution and natural resources will be emphasized in educational programmes designed for rural development.

23.3 STRATEGY

- 23.3.1 Access to general, technical and vocational education will be increased through an equitable spatial distribution of educational facilities.
- 23.3.2 The number of quality institutions (model schools) will be increased and evenly dispersed for the education of talented rural males and females.
- 23.3.3 The participation of the talented rural females and males will be ensured through providing a large number of indigent scholarships for all levels of education.
- 23.3.4 Means will be found to contribute equitably to the loss of opportunity cost to the rural males and females.
- 23.3.5 Special programmes will be launched through the non-formal sector for the motivation of the local communities and for the education of parents of children eligible for entry into school, or those who drop out.
- 23.3.6 As far as possible, education for rural development through formal and non-formal sectors will be used for equipping rural population with employable skills which could cause social mobility and increase in lifelong earning.
- 23.3.7 A university specializing in education for rural development will be established.
- 23.3.8 Education for rural development as a subject will be introduced in the universities, and in

the degree colleges located in rural areas.

- 23.3.9 All general schools located in the rural areas will offer training courses in technical and vocational education during the evening shift to those who drop out from the mainstream of education.
- 23.3.10 Extensive basic education programmes will be launched for females and other deprived groups in the rural areas.
- 23.3.11 Technical and vocational programmes will be launched for the training of out-of-school rural poor through mobile workshops.

24 Physical Education, Sports and Games

24.1 BACKGROUND

- 24.1.1 Education is an all round process for the development of intellectual, moral, social and physical abilities of the youth. The last two decades have seen a consistent erosion of sports activities in educational institutions. Physical education which used to be a part of the school timetable has gradually disappeared. The putative role of sports and games in inducing high moral values, competitiveness and justice has been minimized. The schools and colleges are no more the nurseries they used to be for the grooming of the talented youth. Lack of attention on sports has shifted the balance in favour of negative values of anti-authoritarianism and indiscipline. The importance of sports was emphasized in the Action Plan of the Ministry of Education (1984). However, little has been done to implement the recommendations made in this regard. Low priority given to sports in educational institutions renders the process of education ineffective. This should not be so. The trend must be reversed.
- 24.1.2 The present deficiencies include: lack of sports equipment, playgrounds, trained physical education instructors, financial squeeze and a mismatch between the academic and extra-curricular activities. Further, there are no incentives for sportsmen. Sports competitions within and between schools are rarely held. The Policy recognizes the difficulties, and presents a strategy for improvement of sports and games in educational institutions.

24.2 POLICY STATEMENT

- 24.2.1 Physical education, sports and games will be recognized as a high priority area in the education sector. Physical education will be a compulsory part of the daily timetable in schools and colleges. A separate National Policy on Sports and Games will be formulated, and a national programme for improving sports activities in the educational institutions will be prepared. A National Council of Sports (NCS) will be established. Facilities for the training of physical education instructors will be expanded. A substantial amount of funds (pro rata basis) will be provided to each educational institution for accelerating sports activities amongst students.

24.3 STRATEGY

- 24.3.1 Facilities for the training of physical education instructors will be expanded and colleges of physical education will be renamed as colleges of physical education and sports. All middle and high schools will be provided with trained teachers of physical education.
- 24.3.2 An inter-ministerial committee will be constituted which will coordinate sports program-

mes of the Ministry of Education and Ministry of Culture.

- 24.3.3 A separate unit will be created in each Directorate of Education for looking after and promoting the sports activities.
- 24.3.4 Provision for playgrounds will be made in those schools and colleges which at present have none.
- 24.3.5 Attendance in physical education classes will be compulsory.
- 24.3.6 Scholarship schemes for talented sportsmen will be introduced.
- 24.3.7 A National Council of Sports will be established which, apart from coordinating sports activities in the country, will initiate incentive-based programmes for talented sportsmen in educational institutions.
- 24.3.8 Electronic media will be used to broadcast attractive programmes on coaching in different games and sports.
- 24.3.9 Indigenous games like football, kabaddi, wrestling, volleyball, netball will be encouraged.
- 24.3.10 A master plan for promotion of sports activities will be prepared by each Province, and implemented with matching grants from the Federal Government.
- 24.3.11 The Federal Government will provide special grants for holding inter-provincial sports competitions.
- 24.3.12 Each institution will hold annual sports to which the attendance of all students will be compulsory.
- 24.3.13 In-service training courses for teachers of physical education will be initiated.
- 24.3.14 Physio-medical tests for students will be introduced in all schools.
- 24.3.15 The subject of sports and games will be introduced in the curricula of elementary training colleges.
- 24.3.16 'Pride of Performance' award will be introduced in the education sector.
- 24.3.17 Participation of universities' teams in international games will be encouraged.

IMPLIMENTATION PLAN

PART TWO

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25 The Implementation Plan

25.1 BACKGROUND

25.1.1 Educational development in Pakistan has been structured around several plans, policies and reports. Some of these documents have been referred to in the opening chapter of this Policy. The nationalization of educational institutions in 1971, and the disappearance of private investment from education resulted in increase of public expenditure on education by several orders of magnitude. The 1979 Policy document provided a comprehensive framework along with implementation strategy for introducing educational reforms. A number of reforms were carried to completion. However, a number of several other reforms were either abandoned at various stages of implementation, or, were not processed *ab initio* for implementation. The failure of several previous policies and plans has been generally attributed to weak implementation machinery, mismatch of financial resources and educational plans, over-centralization, inadequate infrastructure, inefficient management, wastage, lack of professionalism, and insufficient use of monitoring and evaluation mechanisms. The Education Policy is to be guarded against these pitfalls. For this reason, a separate chapter is devoted to an *expose* of the implementation plan.

25.2 PRINCIPLES OF IMPLEMENTATION

25.2.1 The regimen of reforms spelled out in the Policy document runs across the whole gamut of education. The Policy has ascribed to education the properties of 'a system' whose parts (sub systems) are organically linked. A change, for example, in the proportion of inputs, the intensity of their use, change in technology, organization or management in one part of the system is likely to have substantial repercussions on other parts of the system, and certainly on its future costs and efficiency. By the same token if any important component is malfunctioning or missing, the performance of the system as a whole is bound to suffer. For these reasons, education should be subjected to a 'systems analysis approach'. This would be possible for the formal system which presents an integrated whole. The non-formal system is another matter in which the various programmes freely stand on their own.

25.2.2 The first principle of implementation would require the machinery (proposed elsewhere in this Report), to take into consideration: (a) the output which is a value-added product, the value being added to the new entrants in the system through educational process of teaching and learning or in other words the quality of the students; (b) the inputs which constitute such elements as students, teachers, physical facilities, libraries, and equipment; and (c) some sort of a ratio between output and input to provide a measure of the efficiency of the system. In the process, however, neither internal efficiency (the quality of the product) nor external efficiency (the marketability of the product) will be compromised.

25.2.3 The second principle relates to central-provincial responsibility. Over the years, the

pendulum has swung in favour of Federal hierarchy despite the fact that education is a constitutional responsibility of the Provinces. The imperatives of a national programme of educational development are understandable, yet, the sum total of educational progress is an additive function of the achievements in the Provinces. This principle never had the opportunity of a fuller expression. Thus, as an implementation strategy, the major responsibility for educational development under the umbrella of the Education Policy will lie with the Provinces. In this arrangement, the Federal Government will retain its role of an initiator, a catalyst, a supporter of innovations, and of monitoring and evaluating the Education Policy as well as the educational process.

25.2.4 **The third principle** is more germane to the tools of analysis and requires the setting up of an accurate and reliable data-base which may facilitate the preparation of logical plans and effective programmes. This realization must go to the Provinces where the original data are collected. This has obvious implications for management. The hierarchical framework for overseeing the implementation of the Policy provides for institutionalizing the process in the Provinces, with professional inputs from the Federal institutions. Such organizations as Provincial Management Information Systems (PMIS) and Provincial Academies of Educational Planning and Management (PAEPM) have been suggested.

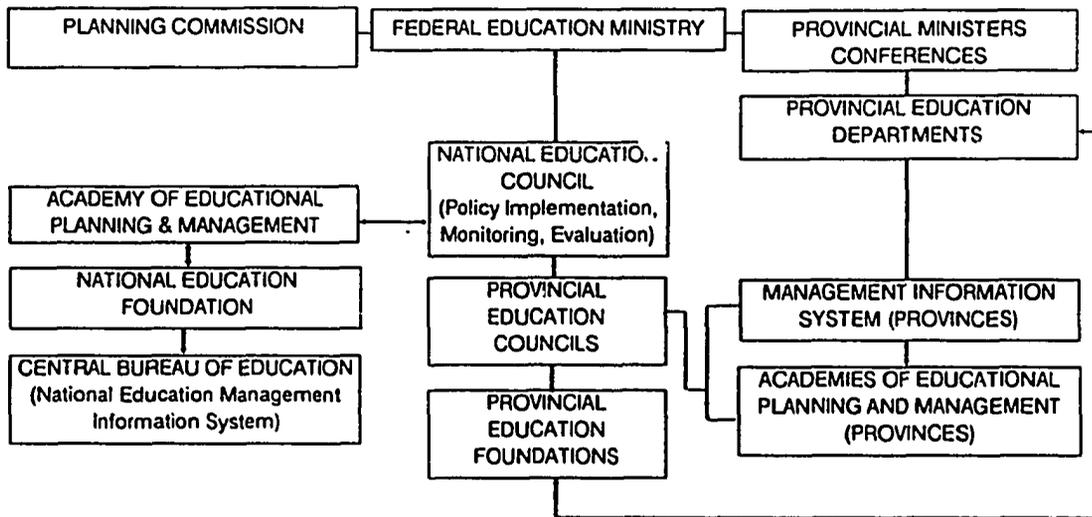
25.2.5 **The fourth principle** looks at the management process itself-as a key to enhancing educational efficiency. The provincial education departments are inadequately equipped with the tools and skills in this important area. Management of education or administration of education has reached a high mark in those countries in which the output-input ratios are high. Accordingly, for efficient implementation of the Education Policy it is necessary that the management of education in the Provinces is professionally organized with men who are trained in the art of management and educational administration. Perhaps, further to this, depending upon the objective conditions prevailing in the Provinces, the devolution of management will touch the local bodies, district councils, and even villages and mohallas. The implementation strategy therefore invites maximum devolution down the line of management scale ending at the community level and, of course, with feedback reaching the highest rung of the management ladder. Relying on Management Information System (MIS) which is in the making in the Provinces, the efficiency of the implementation machinery is likely to increase several fold. And this is what the new implementation plan should be looking for. The proposal for setting up Provincial Academies of Educational Planning and Management may solve some of these problems.

25.3 **MANAGEMENT**

25.3.1 Learning from the past failures, it has been considered necessary to develop a management plan for the implementation of the Education Policy. Such a plan should have the

properties of a system with a built-in design for feedbacks, processing of information, synthesis of data, and evaluation and monitoring of projects under implementation. Accordingly, the institutional framework for this purpose has been identified and is diagrammatically shown below.

SCHEME FOR IMPLEMENTATION, MONITORING AND EVALUATION



It may be noted that the National Education Council (NEC) which advises government on educational matters, is placed at the centre of the management scheme. This Council will oversee the implementation of the Policy, undertaking the task of monitoring and evaluation as well. The Council will also be responsible for research on educational problems. To be able to do so it has been linked with the Academy of Educational Planning and Management (AEPM), the proposed National Education Foundation (NEF) and the National Education Management Information System (NEMIS). These organizations are expected to develop data on various aspects of Policy implementation and pass on the information to the NEC. The AEPM and the NEC will be more intimately related with each other for the purposes of Policy implementation. Similarly, the NEC will interact through exchange of information with its counterparts in the Provinces, the Provincial Education Councils (PECs). In the same way as at the Centre, the PECs will collect information from the field and from Provincial institutions like the Management Information System (Provinces), the proposed Academies of Educational Planning and Management, and the

Provincial Education Foundations, and interact with NEC. The NEC, the PECs and the Provincial Education Foundations will remain separately linked on one hand with AEPM, NEF and NEMIS, and on the other with the Provincial Education Departments.

25.3.2 In the scheme outlined above, the most crucial role has been assigned to the Inter-Provincial Ministers' Conference which will meet periodically (once in 3 months) and receive presentation on the progress of implementation from the NEC. In this way overall supervision of the Policy and coordination will be ensured jointly by the Federal Government and the Provinces. It may be seen that in this scheme except for the Provincial academies, no new organization has been created. The Provincial MIS, we understand, is already in the making.

25.4 MONITORING AND EVALUATION

25.4.1 Monitoring and evaluation is a rare phenomenon in this country. Whatever is done in the name of evaluation of the projects, is usually deficient in design and invariably conducted by non-professionals. Realizing this shortcoming, the NEC will be strengthened with professionals so that the task of evaluation and monitoring can be accomplished with a high degree of professionalism. We hope that performance indicators will be designed for each project initiated under the Education Policy. This may be easy for quantitative expansion, and rather difficult for the assessment of quality. However, means are now being made available for this purpose as well. It is the intention of the Policy that the cost of each project will also include the cost of evaluation and monitoring of the project. The professionals in the NEC will prepare a conceptual paper on monitoring and evaluation of the Policy as a whole, and for evaluating individual projects. This information will be provided to all implementation agencies.

26 Targets, Cost Analysis and Resources

26.1 TARGETS

26.1.1 Education at present is passing through a suffocating financial squeeze. In fact, the squeeze has operated during the last four decades despite the 'theoretical high priority' given to education. Essentially, because of this reason, as is stated by several educationists, the development of education could not be carried to a distinct milestone. The participation rates at primary level stand at 66.3%. The goal of universal primary education remains elusive. The literacy rates are alarmingly low. Indeed, what to speak of other sub-sectors of education, we have not been able to fulfil the constitutional responsibility of eradicating illiteracy, and of providing basic education to all. The ten-fold increase in educational facilities during the last four decades has not been enough to bridge major gaps in educational development.

26.1.2 The Policy, keeping in view the major deficiencies which are to be removed in primary, secondary and tertiary education, has set the targets which may be achieved through effective management and optimal utilization of available financial resources. In Table-1 are recorded the targets which are proposed to be achieved over a period of ten years and compared with the state of educational development in 1992. In the primary sector, the population of 5-9 age group is likely to rise to 22 million in 2002. Thus, in the next decade, 107,000 additional schools and 265,000 additional trained primary teachers would be required to achieve 99.1% participation rate. Further, 24,750 shelterless primary schools are to be provided two-room buildings, 20,000 existing one-room primary schools need an additional room, and buildings of existing 50,000 primary schools would require improvement. Development Cost: Rs.51.342 billion.

Table-1

POLICY TARGETS	1992	2002	POLICY TARGETS	1992	2002
PRIMARY EDUCATION			(B) Colleges of Technology		
Schools	124,000	230,957	Institutions	11	19
Enrolment	11,500,000	21,800,000	Enrolment	13,180	32,506
Teachers	329,000	594,000	Teachers	737	945
Participation rate (%)	66.3	99.1			
SECONDARY EDUCATION			(C) Vocational Institutions		
Schools	19,000	48,487	Institutions	194	527
Enrolment	4,750,000	9,150,000	Enrolment	12,000	41,130
Teachers	130,000	338,586	Teachers	1,685	6,288
Participation rate (%)	32.64	49.87			
HIGHER SECONDARY EDUCATION			HIGHER EDUCATION		
Colleges	535	935	(A) Degree Colleges		
Enrolment	450,000	832,000	Institutions	359	795
Teachers	8,026	14,025	Enrolment	142,000	267,000
Participation rate (%)	7.3	14.0	Teachers	9,322	14,822
TECHNICAL AND VOCATIONAL EDUCATION			Participation rate (%)	2.8	5.0
(A) Polytechnics			(B) Universities		
Institutions	60	99	Institutions	23	43
Enrolment	26,000	60,643	Enrolment	96,000	186,000
Teachers	1,546	4,176	Teachers	4,485	6,415
			Participation rate (%)	0.9	2.0

- 26.1.3 The secondary and higher secondary sub-sectors will necessarily expand as participation rate at the primary level increases. To cope with this situation, secondary participation is being increased from 32.64% (1992) to 49.87% (2002), and higher secondary participation rate to 14% (2002) from 7.3% in 1992. Investment on the development of secondary and higher secondary levels is estimated at Rs.48.07 billion.
- 26.1.4 The literacy rates are targeted to increase from the present 34% (estimated) to 70% by the year 2002. Accordingly, the Public and Private finance taken together will cost Rs.4.511 billion for literacy programmes. For this purpose, much reliance is being placed on NGOs working in the Private Sector.
- 26.1.5 The number of polytechnics is targeted at 99 as compared to 60 in 1992; the enrolment increasing from 26,000 to 60,643. Similarly, the Colleges of Technology will increase from 11 to 19, and enrolment rising to 32,506 from 13,180. However, in this sector, vocational institutions will increase by several orders of magnitude, increasing from 194 in 1992 to 527 in 2002, the enrolment jumping from 12,000 (1992) to 41,130 (2002). This is warranted because of strategy proposed in the chapter on technical and vocational education (Chapter 8), calling for spread of technical education to rural areas. Investment in technical and vocational education will be of the order of Rs.9.44 billion.
- 26.1.6 At degree level, the participation rates are amongst the lowest in Asian countries (2.8%). So is true of university education (0.9%). About 100% increase is therefore proposed both at first degree level and university level. Cost of expansion: Rs.16.166 billion (both for degree colleges and universities). Provision of Rs.2.425 billion has been made for scholarships to increase the access of meritorious students to various levels of education. Several deficiencies have been discovered in teacher-training programmes. In order to remove these deficiencies, not only pre-service training but also in-service training will be streamlined in the Provinces. Cost: Rs.1.698 billion.
- 26.2 **Cost Analysis and Resources**
- 26.2.1 It has been considered desirable that estimates on account of Policy be analysed at the time of Policy formulation. Policies unsupported by financial costs or based on crude estimates, have been usually stalled in the implementation process. Accordingly, in order to firm up the Policy and ensure its implementation according to a financial plan, the whole exercise was conducted in consultation with Provincial Governments as well as the Federal Ministries of Finance and Planning. In doing so, the range of financial resources which could be provided by the Federal Government and Provinces was kept in view.
- 26.2.2 Most of us are highly critical about inadequate allocation to education. The criticism is generally not valid. In fact the determinants of education budgets are complex. These include: (1) the rate of inflation; (2) competing demands of other public services; (3) the

rate of growth of national economy; (4) the nature of tax system and nature and elasticity of educational revenues; (5) inconsistencies in foreign trade; and (6) availability of external assistance. It must also be conceded that the growth of educational budget has to stay in line with overall public revenues which, in turn, depend to a large extent on the growth of the economy. Any increase in educational expenditure (public or private) must come primarily from growth in national economy (GNP). Further, investment on physical capital and the volume of savings are the basis of usual economic design. Yet, it must be understood, as several educational economists have indicated, that investment in human capital brings higher rate of return than investment in physical capital (Asia: primary education 32%; higher education 19%). It is this aspect of economics of education which calls for a reorientation in the strategy for allocation of funds to education. The private and social rates of return accruing from investment on education are the categories which are usually not included in this accounting.

- 26.2.3 The implementation of the Policy would require a meaningful increase in allocation to education since the gaps are too many and too large. The agenda of development is full and comprehensive: universal primary education, more literacy, more primary schools, more secondary schools, more technical and vocational education, more degree colleges, more professional colleges, more universities, more teachers, more facilities, and a score of others. This comprehensive task of expansion which could bring about the unfolding of the genetic potential of the talented amongst the poor masses cannot be translated into reality merely with a threshold allocation to education mentioned above. The GNP allocation to education has moved from 1.61% in 1981-82 to 2.23% in 1991-92. Essentially, during the last seven years it has stayed around 2%, regardless of rapid increase in population.

Table-2

EDUCATION BUDGET (PAKISTAN) AS PERCENTAGE OF G.N.P.						
Future Estimates (projections)			(Rs. in Million)			
Year	G.N.P	G.N.P (%) Growth rate	National Education Budget			Percentage of G.N.P.
			Development	Recurring	Total	
1992-93	1,278,864	7.00	6933	26487	33420	2.21
1993-94	1,368,384	7.00	8880	28467	37347	2.73
1994-95	1,464,171	7.00	9302	29608	38910	2.66
1995-96	1,566,663	7.00	9766	30929	40695	2.60
1996-97	1,676,330	7.00	10175	32434	42609	2.54
1997-98	1,793,673	7.00	10602	34230	44832	2.50
1998-99	1,919,230	7.00	11322	36282	47604	2.48
1999-00	2,053,576	7.00	12433	38664	51097	2.49
2000-01	2,197,326	7.00	13257	41390	54647	2.49
2001-02	2,351,139	7.00	14464	44453	58917	2.51

Education for all

26.2.4 The data of Table-2 indicate the percentage growth of GNP allocation to education between 1992-93 and 2001-2002. Percentage allocation of GNP to education is likely to rise to 2.73 in 1993-94. The average allocation to education as predicted now will be around 2.56 compared to an average of 2.10 between 1983-84 and 1991-92. Further, the deliberate attempt to recapture the initiative of the Private Sector for investment in education is likely to bring substantial dividends. This has not been included in annual GNP percentages recorded in Table-2. It is also envisaged that increase in fees and user charges, improvement of internal efficiency and economies of scale will add up to the package of investment in education in the next decade.

26.2.5 The data of Tables 3-6 provide information about cost analysis (the expenditure) as related to the Policy. Both the development and recurring costs are split province-wise (Tables 3 and 4), and subsector-wise (Tables 5 and 6). Of the projected development expenditure

Table-3

DEVELOPMENT EXPENDITURE (1992-2002)			
Province-wise		(Rs. in Million)	
PROVINCE	PUBLIC	PRIVATE	TOTAL
Pakistan	107290.87	36078.71	143369.58
Punjab	49457.82	15869.50	65327.32
Balochistan	4936.06	1720.90	6656.96
FATA	1941.89	711.60	2653.49
Federal	8365.86	6219.18	14585.04
Sindh	24860.96	7504.53	32365.49
NWFP	14897.31	2944.28	17841.59
AJK	1916.16	823.14	2739.30
FANA	915.02	285.60	1200.62

Table-4

ADDITIONAL RECURRING EXPENDITURE (1992-2002)			
Province-wise		(Rs. in Million)	
PROVINCE	PUBLIC	PRIVATE	TOTAL
Pakistan	78976.40	13184.27	92160.67
Punjab	33687.71	5094.57	38782.28
Balochistan	4602.72	953.29	5556.01
FATA	1923.85	466.59	2390.44
Federal	1877.59	541.92	2419.51
Sindh	23977.38	4450.02	28427.40
NWFP	9520.83	918.79	10439.62
AJK	2450.30	577.19	3027.49
FANA	936.03	181.90	1117.93

Note: Recurring expenditure on education in 1992-93 amounts to Rs. 26.487 billion.

of Rs.143.369 billion, Primary Education will receive 35.8%, Literacy 1.0%, Secondary Education 27.2%, Higher Secondary Education 6.3%, Higher Education (first degree level) 4.2%, Technical and Vocational Education 6.6%, Teacher Education 1.2%, University Education 7.1%, Education Foundation 5.2%, Scholarships 1.7%, and miscellaneous 1.6%. This adds up, as shown in Table-3 to a total of Rs.143.369 billion (107.290 from the Public Sector and 36.078 from the Private Sector). On recurring expenditure a further increase over the existing figures is estimated at Rs.92.160 billion. The details are recorded in Tables 4 and 6. It is hoped that the financial plan of the Policy, prepared in consultation

Table-5

DEVELOPMENT EXPENDITURE (1992-2002)			
Sub-Sectoral	(Rs. in Million)		
LEVEL	PUBLIC	PRIVATE	TOTAL
Primary Education	51342.90	0.00	51342.90
Literacy	1227.00	3284.00	4511.00
Secondary Education	26003.18	12985.72	38988.90
Higher Secondary Education	7235.30	1847.50	9082.80
Higher Education	2424.30	3582.00	6006.30
Technical and Vocational Education	3729.50	5710.50	9440.00
Teachers Training	1698.31	0.00	1698.31
University Education [†]	5230.00	4930.00	10160.00
Education Foundation*	3739.00	3739.00	7478.00
Scholarships	2425.27	0.00	2425.27
Miscellaneous*	2236.10	0.00	2236.10
Total	107290.86	36078.72	143369.58

[†]Includes Agriculture Universities

*Includes Recurring Expenditure

Table-6

ADDITIONAL RECURRING EXPENDITURE (1992-2002)			
Sub-Sectoral	(Rs. in Million)		
LEVEL	PUBLIC	PRIVATE	TOTAL
Primary Education	29213.78	0.00	29213.78
Secondary Education	38662.49	7940.50	46602.99
Higher Secondary Education	6443.30	1301.39	7744.69
Higher Education	845.99	2235.26	3081.25
Technical and Vocational Education	1816.66	1707.12	3523.78
Teachers Training	1383.84	0.00	1383.84
University Education	610.34	0.00	610.34
Total:	78976.40	13184.27	92160.67

with the Provinces will facilitate the implementation of the Policy. A projectised Action Plan, based on targets and parameters set in the Policy, and which accompanies the Policy, is being issued as a separate document.

List of Acronyms

AIOU:	Allama Iqbal Open University
AEPM:	Academy of Educational Planning and Management
BISE:	Board of Intermediate and Secondary Education
CAD:	Computer-Aided Design
CAM:	Computer-Aided Machine
FCC:	Funding Council for Colleges
GNP:	Gross National Product
HS:	Higher Secondary
IBCC:	Inter Board Committee of Chairmen
IET:	Institute of Education Technology
MIS:	Management Information System
NCAAA:	National Council of Academic Awards and Accreditation
NCC:	National Cadet Corps
NCS:	National Council of Sports
NEC:	National Education Council
NEEC:	National Education Equipment Centre
NEF:	National Education Foundation
NEMIS:	National Education Management Information System
NETCOM:	National Education and Training Commission
NGO:	Non-Governmental Organisation
NITRL:	National Institute of Training and Research for Literacy
NOC:	No Objection Certificate
NSRDB:	National Scientific Research and Development Board
NTS:	National Testing Service
NWFP:	North-West Frontier Province

PAEPM:	Provincial Academy of Educational Planning and Management
PBC:	Pakistan Broadcasting Corporation
PCAAA:	Provincial Council of Academic Awards and Accreditation
PEC:	Provincial Education Council
PFC:	Provincial Funding Council
PMIS:	Provincial Management Information System
PTC:	Primary Teachers Certificate
PTV:	Pakistan Television
R and D:	Research and Development
SAP:	Social Action Plan
TRC:	Teachers Resource Centre
TV:	Television
UGC:	University Grants Commission
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
UPE:	Universal Primary Education