

CHAPTER – 14

PLAN for the FUTURE – CHALLENGES and OPPORTUNITIES

Demographic trends in Pakistan indicate a youthful population. Currently Pakistan's population in the age group 17-23 is estimated to be 13% of the total population, and almost 20 million in numbers. It is estimated that by the year 2010, this age group will be about 25 million in numbers. (1)

The above presents both a challenge and an opportunity. If this large reservoir of youth is not properly trained and channelized into nation building human resource creativity, it could end up tearing apart the very fabric of society. However, if it is properly channeled it would mean equipping Pakistan with the necessary means to overcome its deficiencies in physical resources. This opportunity comes about at a stage when the developed world is faced with a problem of a shrinking base of youth supporting an increasingly large population of the elderly. No doubt, scientific advances leading to automation and robotics, will help the advanced world to overcome some of the negative effects of this inverted population pyramid. However, the opportunities for youthful countries like Pakistan will remain provided that Education is imparted as true enlightenment focusing on creativity and moral values, rather than just material advancement.

THE IMPERATIVES of GLOBALIZATION

The imperatives of globalization are that there will be no protective barriers and Pakistani manpower will have to compete on a global basis. Therefore, training must be of high, competitive quality, to ensure that it can hold its own internationally.

The issues confronting Pakistan in the field of higher education can be put under the following two heads:

- a) Those of numbers; and
- b) Those of quality.

THE ISSUES of NUMBERS

As stated above, the numbers of youth in the age group 17-23 are currently estimated to be around 20 million. They will increase to 25 million by the year 2010. (11) The type of manpower that will enable a country to hold its own against international competition in the 21st century, will have to be of a very high order. In short, graduation should be the minimum level of education, with a large number of Ph.Ds.

As has been indicated earlier, enrolment in the tertiary sectors in Pakistan is only 2.6% of the relevant age group. Countries in the neighborhood are having enrolment as high as 8 to 11% of the age group. Consequently, the Vision-2010 for Higher Education in Pakistan, prepared by the University Grants Commission in 1997, envisaged an enrolment of 10% of the age group in Higher Education by 2010. (2) In other words, the places in Higher Education need to be increased from the current 0.6 million to 2.5 million by 2010.

The Planning Commission, looking only at the domestic job market, and totally neglecting the opportunities that Higher Education can bring, insisted that the growth should be confined to 5% of the age group by 2010. Consequently, the National Education Policy 1998-2010, lays down in terms of numbers the goal of 5% of the age group to be achieved by the year 2010. (3) Even with this modest and under-pitched target, the current enrolment in the Higher Education Sector needs to be doubled. The question would be, what route should be adopted to achieve a significant growth in terms of numbers in Higher Education in Pakistan? The government must be cognizant of the fact that till such time that the economy picks up and jobs become available, it would be in the interest of good governance to create places for the youth to spend some extra time in higher education; in fact using the parking function of education. It should be mandatory for every university to produce a minimum number of Ph.Ds. every year.

1. THE ROLE of the PRIVATE SECTOR

The historic trend in Pakistan has been that despite pious pronouncements, Education has never received its due allocation of funds. Even worse, the commitment of the government towards Education has never manifested itself, so that even non-monetary steps for improving educational standards were never taken.

The other shortcoming has been that even the educational institutions that are functioning, could never get their due funding in their recurring budgets to maintain quality. The financial crisis through which Pakistan is currently going, indicates that in the foreseeable future there will be no dramatic increase in investment in Higher Education. This is regrettable, to say the least. Henceforth, the Iqra Surcharge needs to be devoted completely to Education, for which it is meant, solely. That will make a world of difference to the cause of Education in Pakistan.

The above situation has not dampened the enthusiasm of the Private Sector for entry into the field of Higher Education. This, then, is the main window open to the country for a dramatic increase in numbers, so as to cater to the vast demand that exists within the country for Higher Education, and also to meet the imperatives of the 21st century. Pakistan, therefore, has no option but to go out of its way in encouraging the Private Sector to step in and fill the gap, which the public sector is unable to do while protecting and supporting the public sector, in order to make it sustainable, in the interest of justice and equity, balance and moderation. The two sectors need to be developed

harmoniously as supplementary and complementary to each other, in the abiding national-social interest – and not as rivals.

So far the Private Sector has been given a step-motherly treatment by the governments, both at the federal and the provincial levels. No financial assistance has been given to the institutions at the tertiary level. No other assistance in the form of land grant and preferential tariff for utilities has been extended. In fact, educational institutions have been subjected to taxation in some of the provinces. This needs to be remedied on merit.

However, the main bottleneck which the sponsors of new institutions have been meeting, lie in:

- a) Obtaining affiliation with existing universities, to legitimize their degree programmes.
- b) Obtaining charters for the institutions to function independently.

2. THE PROBLEMS of LEGAL RECOGNITION

New entrants in the field of Higher Education have to obtain a legal cover in order to enable the graduates to get their degrees equated and accepted for job purposes. The first preference of this is to approach existing universities, both in the public and in the private sector, for affiliation of their institutions for degree programmes. The response is

discouraging and dampens the enthusiasm of many persons. The Public Sector Universities treat them with disdain and do not entertain applications. If, by dint of herculean efforts, they get their applications accepted, it takes them years to obtain affiliation. In the meantime, a crop of students is ripe for their degrees and they do not know where to turn in order to save the years of studies that they have already put in.

The fortunate ones who have already got the charter, are also not very understanding or gracious in their approach to the new institutions. They fully demand their pound of flesh, and affiliations are granted on conditions that the institute to be affiliated will surrender 15 to 20% of its gross income for retaining the privilege of affiliation.

The above picture does not fully depict the agony and anxiety of the new institutions, for even after they make the payment, they continue either to be harassed on one pretext or the other, or else, they are totally ignored, resulting in poor quality of education.

In this regard, the most liberal have been the Provincial Governments of Sindh, and Azad Jammu & Kashmir, which between them, have chartered most of the new universities in the Private Sector. The most retrograde have been the Governments of Punjab and NWFP, who have refused to charter any institution in the Private Sector in the last few years. The Federal Government has recently chartered a number of universities in the Public Sector or quasi-public sector in the federal territory. The result has been that

the Higher Education Sector has not kept pace with the demand for new places in the country. One finds Pakistani students going abroad. Not every one is fortunate to be able to afford education in the better institutions of the USA. Two thirds of these students are in under-graduate programmes, while only one-third are in graduate programmes. Various estimates indicate that Pakistani students in the USA are spending on an average at least US\$ 150 million on their education. This is ironic, when compared to the fact that the Government of Pakistan gives an annual grant of merely 40 million US dollars to all its universities in the country. Quality education in Pakistan could attract at least a part of the US \$ 150 million currently spent in the USA.

Besides the advanced countries, Pakistani students are also studying in countries like the Turkish Republic of Northern Cyprus (Pakistani students estimated to be around 1200), Philippines, Sri Lanka, Ukraine and the Central Asian Republics. Surely, the infrastructure exists in Pakistan for providing places to young people to get education equal to, if not better than, in some of these countries. Even in the USA, many of the students are likely to be enrolled in institutions which are not of a very high standing.

3. CHARTERING of INSTITUTIONS

The present system of chartering institutions is cumbersome, as even in a situation like the one presently existing, where the law-making assemblies are suspended and legislation is by means of ordinance, private sponsors are finding it difficult to obtain charters. In a situation where the assemblies are functioning, the process is even more

complicated. The suggestion, therefore, would be to look at the model that exists in India. Here the University Grants Commission of India, under its Act, has the powers to declare institutions of quality to be deemed universities. The privilege of a deemed university is that its academic programme is given legal cover and its degrees are recognized at par with degrees awarded by fully chartered institutions. The deemed university status is generally accorded to institutions having limited disciplines, may be one or two, in which they have acquired expertise and high standards. As a deemed university, it gets the legal cover for its academic programme, and can then continue to consolidate and grow, so that eventually it can get the charter of a university. In Pakistan, there is no intermediate stage, as institutions and full-fledged universities have to go directly for a charter, the process for which is the same in either case.

The reports are that the scheme in India is working well; and the deemed universities being institutions of quality in disciplines with market demand, are opening up branches outside of India.

The pattern, therefore, for the Government of Pakistan, would be to:

- a) amend the University Grants Commission Act, to give it power to give deemed university status to institutions of quality;
- b) simplify the process for grant of charter, both in the provinces and at the federal government level.

Another factor which cannot be overlooked, is the aggressive marketing by foreign educational institutions in Pakistan. The "O" level and "A" level system has been in vogue even prior to the creation of Pakistan, and continues to be popular with those segments of society, which intend to send their children abroad for further education. This stream of education is generally offered in private institutions charging high fees, and hence they cater to the privileged. American universities have been quietly very active, skimming all the best brains, by offering admissions and financial assistance to students. Those students from privileged institutions like the Atchison College, Lahore and Grammar School, Karachi, etc., find most of the talent taken away at a youthful age. These children will almost never return. This, and other efforts of the developed world to skim off the best talent in developing countries, leaves them crippled in terms of brainpower to help build up their own institutions and attain excellence. It is commonly believed that it is this youthful manpower, mostly from Asiatic countries, that continues to enable the United States of America to maintain its technological and economic lead.

Pakistani planners and the governments of the day have ignored this issue altogether leading to the nation being bled white of its intellectual talent. If more institutions were available within the country, a lot of this manpower would remain behind. This is not an advocacy for a policy of isolationism. One is well aware of the fact that new knowledge is not being created here. In order to keep abreast of international developments, interaction with the outside world is essential. What is being advocated is that Pakistan should not compel its youth to go out at a tender age, when they are not yet

mature and in a position to decide objectively the directions in which they would like to go.

THE ISSUES of QUALITY

Having dealt with problems of numbers, it is time to confront the second issue, which is that of quality. The process of globalization makes this an inescapable requirement for any meaningful development in the country.

1. ROLE of the PRIVATE SECTOR

Private Educational Institutions can survive only if they cater to the demands of the market, both in terms of type of disciplines and quality. If they ignore either, they will not be able to survive for very long.

The propensity, or indeed, the compulsions, of the Private Sector to operate only in those areas where there is a market demand, leaves certain vital disciplines unattended. These disciplines are essentially the Human and Social Sciences, and here it will have to be the Public Sector that will keep the candle alight. Indeed, it will be an unfortunate nation where the Social Sciences and other non-market driven disciplines are ignored. A people cannot afford to ignore its history and philosophy, and indeed other disciplines which are vital to built national spirit, national cohesion, and to bring home, the fact that

while they are a part of the international community, they have roots going into the deep past. That they have an identity which is worth preserving and maintaining. Without these roots to anchor them in their own culture, they would be mere driftwood on the global ocean.

2. THE MEDIUM of INSTRUCTION

The issue of the medium of instruction has long plagued Pakistan. There is an overwhelming voice which insists that the best medium of instruction is the mother tongue, and it is essential that teaching be done in a language that the students fully comprehend. This enables the child to develop his personality and to identify himself with his national and social environment, culture and roots.

Then there are those who point out that the process of globalization makes it essential that Pakistan must have a language with which it can communicate with the rest of the world. English is clearly outstripping all other languages to become a medium of communication the world over. The information technology boom has further strengthened the position of English, and hence without a functional mastery of the English language, Pakistan cannot even enter the process of globalization.

Both the arguments have considerable validity, and neither can be dismissed summarily. In fact, any government which tries to oust one at the cost of the other, will do immeasurable harm to the progress of the nation. The *via media*, therefore, is what the

country should look for. The answer would be to keep schooling essentially in the mother tongue, with English as a second language. Higher education, however, should be totally in the English language. This will be very true for the disciplines of Science and Technology. However, conscious decision must be taken, so as to avoid further energy being dissipated on a fruitless controversy.

3. DURATION of the FIRST DEGREE

Pakistan's academic degrees have to measure up to international comparison. The first yardstick that is applied when comparing degrees, is the length of schooling that has gone into the award of the degree. In Pakistan, the first degree is awarded at the end of 14 years of schooling. Internationally, the first degree is awarded either after 15 years of education, in some countries, or after 16 years of education in most of the countries.

Efforts were made in the 1960s to rectify this situation, but because of massive reaction from students, not only was this requirement scrapped, but a number of other useful reforms were done away with. No one has analyzed whether the students' reaction was essentially against educational requirements, or was it a show of resentment against the military government then in power. However, the result has been that no government thereafter has tried to rectify the situation, for fear of a backlash. The Education Policy 1998-2010, did make an effort, but it was a halfhearted effort when it mentions that: (3)

"To bring our degrees at par with international standards, and yet not disturb the existing academic structure, the following measures shall be adopted:

- i) B.A./B.Sc. shall continue as at present.*
- ii) One year B.A./B.Sc. (Hons.) course after B.Sc. shall be launched in all the colleges.*
- iii) Students with Honours degrees shall be given preference for entrance to universities."*

No practical steps have been taken for implementing this recommendation. Sooner or later, Pakistan will have to address itself to this issue, and to bring the length of schooling needed for the award of the first degree at par, internationally.

4. POLITICAL COMMITMENT

There are many ingredients which go to improve the quality of Education, but do not directly need finances. All these elements flow out of a certain acceptance and the will of a society at large to achieve a particular objective. In the field of Education, it appears that Pakistan as a society has not collectively accepted either the importance or the necessity to improve the quality of Education.

One of the important symptoms showing this lack of national and political will is the existence of the students' arm of political parties on university and college campuses. Student politics and awareness is an accepted phenomenon the world over, and Pakistan cannot make its universities sterile in this regard. However, what is objectionable is the fact that these student bodies function as the extension of political parties, which use them at their convenience for disruption to suit their political agendas. None of the political parties are consciously prepared to abandon their political links with universities.

The malady goes deeper, because teachers and sub-ordinate staff have also got infected and unionized. The result is that university administration is hostage to external factors, and it is not always academic considerations that warrant decisions.

It is high time that political parties made a distinction between issues of national interest, and those of parochial and local interest. In most countries of the world, political parties have a consensus on national interests, on which there is no divergence of opinion. Pakistani political parties need to be educated and persuaded to give up the exploitation of university students for their personal, partisan or parochial political ends.

There is a Supreme Court decision to the effect that student unions should not function. The university administration at the time of admission of students also obtains a bond from students to the effect that they will not indulge in politics. Despite this, the reality is different, and political parties continue to influence the situation on campuses. This needs to be rectified, if Pakistan is to achieve quality in education.

5. FACULTY DEVELOPMENT

Dedication and brilliance apart, the first requirement for a University Teacher is an appropriate academic qualification. In Public Sector Universities in Pakistan two thirds of the faculty hold only a simple Master's degree. It needs to be kept in mind that a Master's degree in Pakistan is awarded after 16 years of Education, whereas in the USA, a Bachelors degree is awarded after 16 years of education. Therefore, two-thirds of Pakistan's university teachers are internationally equateable with a Bachelor's degree. How can one expect Pakistani degrees to be recognized internationally, and their holders to be accepted internationally? Urgent steps must be taken to upgrade the qualifications of the existing university teachers. In this regard, the following steps must be taken at the earliest:

- a) Fresh recruitment of teachers in universities without a Ph.D. degree should be banned.
- b) No appointments should be made to the post of Lecturers. Instead, suitable candidates be inducted as Teaching Associates in BPS-17 on a 2-year contract.
- c) Teaching Associates should teach and also enroll in the M.Phil. programme in his department.
- d) If, at the end of two years, the Teaching Associate fails to acquire an M.Phil degree, his/her contract should not be renewed. If he/she obtains an

- M.Phil degree, then he/she should be given a 3-year additional contract and enrolled in the Ph.D. programme.
- e) If at the end of 3 years, he/she obtains the Ph.D. degree, he/she should be appointed as Assistant Professor.
 - f) The indigenous Ph.D. programme initiated by the Ministry of Science and Technology for University Teachers should be expanded and continued.
 - g) A similar programme should be initiated by the Ministry of Education for Teachers in the Human and Social Sciences.
 - h) Services of teachers who do not obtain the Ph.D., should be terminated from the university, or they should be transferred to colleges.

6. COLLEGE EDUCATION

Quality at the university level is greatly dependent upon the quality of knowledge with which students have been equipped in lower rungs of Education. The College Sector in Pakistan is the weakest. It has suffered greater neglect than any other. A heavy investment, both in infrastructure and faculty upgradation is called for.

7. LINKAGES with INDUSTRY and COMMUNITY

Universities are not institutions in isolation. They must realize that they exist in the context of the community where they are located. They are more than an institution disseminating knowledge. They are an agent of essential, or even critical, social change.

This realization is essential if the university is to have a meaningful existence. Once this comes about, the university will be part of the community where it exists, and also maintain very close links with the industry and agriculture around it. It would then be possible for these institutions to develop into active agents of social change.

8. RESEARCH

The university is qualitatively different from a college, because of the expanded functions that it has to perform. Generally, a university must be involved in:

- a) Preservation, promoting and dissemination of knowledge.
- b) Creation of new knowledge.

It is in the field of the creation of new knowledge that Pakistani universities have lagged behind sorely. Research culture has not developed in these universities. As a

result, barely 1% of the university budget is seen to be dedicated to research. Even here, the research, both in terms of quality and direction, is wanting.

It would be worthwhile to follow-up on the suggestion of the University Grants Commission to create a Research Endowment Fund of about 50 billion rupees. The income from this endowment fund can then be used for funding specific research projects.

To start with, this research need not be theoretical, but should address itself to the practical problems of the country and society, so that universities can lead the way in the fight for the improvement of the quality of life of the people. In any case, a pragmatic balance between basic / theoretical research and applied research, would be essential.

9. GENERAL FACTORS AFFECTING QUALITY

The following issues must be taken care of, if Pakistan is to achieve meaningful improvement in the quality of education in its universities:

- a) The selection of teachers and other staff should be done on merit. Political considerations should not be brought to bear on the universities.
- b) The universities must be subject, both to external and internal academic audit. Funding must be related to the results of such an audit.

- c) The university staff should be well paid, to secure quality. Public Sector Universities are paying wages in accordance with other incumbents of public services. The salaries of teachers should be delinked from government grades, and fixed in accordance with the market demands for each discipline. Fortunately, the Private Sector Universities are already doing this. The Public Sector needs to adopt this practice.
- d) The libraries and laboratories of colleges and universities must be strengthened.
- e) Curricula of universities are being revised periodically by the University Grants Commission. The process needs to be more dynamic and acceptable to the teachers on campus. The modernization of curricula is not a difficult process. However, it is the teaching of those curricula that needs to be strengthened. Teachers need to be retrained. Books and journals need to be provided and other teaching aids should be made available to teachers. Teachers must be required to produce quality textbooks and books of readings and reference.
- f) Total working hours in a year in Pakistani universities are not adequate. There are too many holidays and other interventions, planned and unplanned. The working hours are very short and need to be increased.
- g) Vice-Chancellors and heads of universities need to be selected with great care, and for this purpose Search Committees should be appointed.

10. FUNDING UNIVERSITIES

The present funding of Education is slightly above 2% of GNP. The following recommendations are note-worthy:

- a) For a minimum of 4% investment in education, Pakistan needs to invest better in the field of education. Out of the meager allocations for Education, the Higher Education Sector gets very little.
- b) Universities need to economize and better utilize the funds available to them.
- c) Tuition fees need to be raised to full cost of education, plus 25%. Students should be admitted on merit, and those who cannot pay the fees, should be given deferment of fees as 'Qarz-e-Hasna', to be paid in later life when the student is able to do so.
- d) User charges like bus fares, hostel charges etc. must be recovered in full.
- e) The Iqra Surcharge should be devoted completely and exclusively to Education.

11. ADMISSION TESTS

All admissions must be on merit, and there must be a Testing Service to determine both the knowledge and aptitude of a student for the particular discipline that he wishes to be admitted in.

12. **THE NATIONAL COUNCIL for ACCREDITATION and QUALITY ASSURANCE (NCAQA)**

The National Council for Accreditation and Quality Assurance should be established at the earliest, in order to help the weaker institutions to improve the quality of education dispensed by them.

13. **DISTANCE LEARNING**

The exciting opportunities presented by Information Technology should be fully utilized. The Allama Iqbal Open University should also be strengthened and if possible, some more Open Universities should be established.

14. **INTERNTIONAL LINKAGES with UNIVERSTHIES**

Pakistani universities would be well advised to establish linkages with universities abroad. This will help in improving their quality of education.

15. **PLANNING for the FUTURE**

Continuous scanning, monitoring and planning for the future of Education in Pakistan should be undertaken by all individuals, institutions, and agencies concerned with it, from the federal to the local level. The UGC can act as an exemplar in this respect.

The action plan for the future

In the light of the foregoing discussions we are now in a position to make a road map for the future as given below:-

<i>S.No.</i>	<i>Recommendation</i>	<i>Proposed Action</i>
1	Recognition of the role of higher education as a factor of development.	A firm commitment by the Government manifested in its agenda to fund higher education.
2	Science education to be considered as part of infrastructure development	Planning Commission to include in its planning process.
3	Planning of required manpower for the country	Planning Commission, Ministry of Education & Ministry of Labour & Manpower & UGC to have rough estimate of manpower requirements.
4	Enactment of Education Policy as a law	UGC in consultation with Ministry of Education and Law Ministry to prepare the draft for the law.
5	Education system to integrate Islamic values and cultural heritage	Curricula, teaching & learning process to reflect and emphasize Islamic values and cultural heritage.
6	Higher Education's aim must be to promote intellectual power and develop capabilities	Quality higher education, rigorous teaching and learning process to promote higher education aims. Careful framing of curricula.
7	Massive investment of resources and commitment for higher education.	Government must allocate at least 4% of GNP for education. Out of this at least 1% of GNP for higher education to increase to 2% of GNP by 2010.

8	Diversity, quality and pursuit of excellence, responsiveness and relevance are to be the basis for the development of higher educational system.	Provide qualified teachers, proper well equipped labs. and libraries.
9	Introduction of minimum 3 year degree programme after class-12.	<ul style="list-style-type: none"> • Increase present degree course to 3 year degree course. • Intermediate colleges to be separated from degree colleges. • Universities to concentrate on Master and higher degree courses.
10	Access to higher education to be expanded to accommodate at least 10% of student population which would be 2.5 million by the year 2010.	<ol style="list-style-type: none"> 1. Private and public sector to be encouraged and given incentives for instituting a diversity of higher education institutions. 2. Increasing number of degree awarding institutions. 3. Pursuit of independent courses of studies and new disciplines in universities. 4. UGC, MOE & Provincial Governments to devise a long term plan to accommodate and meet the demand of rising student population. 5. Establishing a diversity of universities of technical and vocational nature.
11	Establishment of new disciplines / emerging sciences in universities, down sizing and merging / closing of redundant departments.	A thorough review of higher education institutions for establishing and downsizing institutions.

12	Establishment of additional campuses by public universities to increase their intake.	Universities to establish additional campuses to accommodate students.
13	71:29 ratio of arts and science subjects to be changed to 50:50.	<ol style="list-style-type: none"> 1. Enrollment in degree colleges to be streamlined. 2. To alter the present ratio of arts and science to 50:50.
14	Expansion of professional education.	Establishment of Centres of Advanced Studies and Research in professional universities and colleges.
15	Strengthening of professional education by creating extra physical facilities.	To cope with the increasing number of students in professional education, extra physical facilities will be created in all the professional universities by constructing new laboratories, libraries and class rooms to accommodate increased strength of students.
16	Improving the quality of higher education	<ol style="list-style-type: none"> 1. Review and revision of curricula and courses. 2. Strengthening of instructional materials and aids. 3. To procure latest editions of textbooks and journals. 4. Remunerate authors for writing textbooks relevant to Pakistan conditions. 5. Provision of laboratory / field equipment. 6. Workshops and seminars for up-dating knowledge and skills. 7. Institutions capacity building for post-

		<p>graduate education</p> <p>8. Fellowships and study tours.</p> <p>9. External / Internal review of higher education.</p> <p>10. Use of computers and other Information Technology tools.</p> <p>11. Creation of co-curricular facility.</p>
17	Liaison Committees	Each university should establish liaison committees to seek cooperation with industry to promote commercialization of their research results. UGC may also have such a committee to evolve a national policy.
18	Representation of industrialists on various authorities of the universities.	Universities to initiate the process. Acts may be amended.
19.	Technology Parks / Research Centre	Each university may allocate suitable land on the campus to establish Technology Park/Research Centre in collaboration with local industry. Amendment in Acts may be made.
20	Consultancy Services	Universities should improve presentation and marketing the skills of academic and improve information about their expertise. Ensure good advisory service to their clients to win their confidence.
21	Internship Programme	Each university must include training of their students in industry & R&D organizations. It should become part of requirement of a degree.

22	Research collaboration between industry and universities/R&D organizations	Industry must be made to invest in the research and development efforts. A Federal Law may be enacted to ensure such collaboration. UGC must initiate such a proposal.
23	Flexible curriculum responsive to market forces.	Universities to initiate the process in collaboration with the UGC.
24	Enactment of status of Colleges of Technology	Up-gradation of existing facilities in Colleges of Technology by providing inputs.
25	On job training of engineering graduates.	Universities in collaboration with provincial agriculture departments will initiate training through: <ol style="list-style-type: none"> 1. Agriculture Extension Departments 2. Pakistan Agriculture Research Council 3. National Agriculture Research Council 4. Agro-industry.
26	Industrial training of engineering graduates	Engineering universities will negotiate with industrial establishment to develop arrangements. Ministry of Production and Industries will issue directive to units under their control.
27	On job training of animal husbandry and veterinary science graduates.	Colleges of Vet. Sciences and Agriculture Universities in collaboration with Livestock Departments in Provinces and also with private farms owners will evolve schedule of training.
28	On hand training of business graduates	Universities imparting education will develop linkage with business/commercial concerns and Chamber of Commerce and Industries for training.

29	Affiliating Universities	Establish affiliating universities. Eventually the universities will become financially independent. Charter would be needed.
30	Autonomy to better degree colleges	Better degree colleges to be upgraded to autonomous status.
31	Open Universities	Establish more open universities Execution and charter to be granted by Provincial Governments. Eventually the Universities will become financial independent.
32	Computerization of Examination Departments	Computers be provided to the universities by UGC.
33	National Education Testing Service	1. NETS to be established in UGC 2. Need to amend Act of UGC.
34	Local higher degree programme	Train M.Phil. and Ph.D. scholars per year.
35	Strengthening of university departments.	Linkage agreements shall be negotiated with reputed foreign universities for the purpose of : 1. Training of faculty members under split degree programme every year. 2. Short term/long term exchange of teachers. 3. Collaborative research programmes. 4. Participation of faculty members in international seminars and conferences and exchange of material. 5. UGC to identify foreign universities and initiate negotiations and formulate projects for approval of the Ministry of Education / Planning Commission.

37	Participation of university teacher in international conferences and seminars.	Every year faculty members shall be sent abroad for participation in international conferences and seminars. The condition of NOC should be waived by the Government.
38	Evaluation of performance of university teachers.	UGC will design the evaluation proforma in collaboration with the Vice-Chancellors and experts.
39	Establishment of Teachers' Training Academy	<p>The following training courses shall be started:</p> <ol style="list-style-type: none"> 1. Four months pre-service training course for teachers 2. One month in-service training course for orientation of teachers 3. Two weeks management training course every year.
40	Creation of a separate University Teachers' Cadre	UGC shall initiate legislation in consultation with Ministry of Education, Finance Division and Law & Justice Division.
41	Loan facilities for higher studies	<p>Banks and other financial organizations shall be required to provide loans to university teachers for higher studies within the country and abroad.</p> <p>UGC shall take initiative to approach relevant agencies for the purpose.</p>
42	Post-doctoral training of local Ph.Ds. abroad	25 local Ph.D. faculty members shall be sent abroad annually to orient them with the latest developments in their fields.

43	Foreign Scholarships	Teachers of universities and Centres of Excellence shall be sent abroad for higher studies leading to Ph.D. annually.
44	Teachers mobility programme	University Professors/Associate Professors shall be encouraged to join other institutions on sabbatical leave. UGC to make circulation possible in collaboration with the Universities.
45	Priority areas of Research	UGC in consultation with the universities, R&D organizations and industry shall prioritize the areas and disciplines of research keeping in view their usefulness for socio-economic development of the country.
46	Long term support for joint research projects in collaboration with industry.	Joint research projects shall be developed in collaboration with the R&D organizations and industry.
47	Research in universities	UGC shall encourage balance in teaching and research in favour of research in universities by enhancing the allocation for research in universities' budget.
48	Creation of an endowment for research in universities.	An endowment shall be created for promotion of research in the universities and Centres of Excellence.
49	Generate additional income by enhancing tuition fee	Suitable increase in tuition fee in universities.
50	Enhancing user charges	Remove subsidies on hostel accommodation and services to recoup actual unit cost from users.

51	Raising funds through self-financing scheme	Encourage universities to admit students under self-financing scheme to meet the shortfall in the budget and lessen the burden on public exchequer.
52	Extending consultancy services	<ol style="list-style-type: none"> 1. Provide incentives to universities and encourage them to extend consultancy services, contract research and other problem solving assignments. 2. Increasing university income from fee for consultancy services and other problem solving assignments. 3. Generate university income from contract research.
53	Allocation of grants	Allocation of annual grants to the universities, centres and institutions of higher learning partly on need basis and partly on performance basis.
54	Entrepreneurial activities	Generate income from immovable assets etc. and by entrepreneurial activities.
55	Tap non public resources for finance	Universities to seek donations from philanthropists, affluent organizations etc.
56	Facilitate release of available resources	Streamline quarterly releases of approved Government grants in a financial to ensure timely expenditure without lapse of grants.
57	Improve the balance between salary and non-salary expenditure.	Enforce norms for determining the faculty strength for reducing the expenditure on non-teaching staff.
58	Campus Peace Corps	Campus Peace Corps to be established on each university campus.
59	De-politicization of campuses	Provision to be made in Universities Act to ban union/political activity on campus.

60	Infra structure for physical education, play grounds, sports equipment.	Funds to be provided by Provincial Governments, UGC and Ministry of Education. Create facilities for physical education.
61	Master plan for promotion of sports activities.	Universities to initiate the process.
62	Recognition of potential of information technology	Schemes to be launched for IT projects for universities.
63	Facilities of e-mail, Internet and networks to be provided to universities and the PTC to provide the facilities at reduced rates.	Special allocation to be made urgently for provision of required facilities.
64	Centres of Advanced Computer Sciences and Information Technology be established in those universities where post-graduate courses are offered.	PC-I Schemes to be launched for computer centres.
65	Amendments in the Acts of the Universities	<ol style="list-style-type: none"> 1. To restructure 2. To reorganize Syndicate 3. Strengthen Academic Council 4. Establish University Education Service 5. Establish University Service Commission 6. Search Committee for Vice-Chancellors
66	Amendments in UGC Act.	<ol style="list-style-type: none"> 1. UGC to monitor, evaluate, audit administrative, financial and academic standards of the universities. 2. Visitation of the universities/institutes by UGC 3. Power to grant charter/degree awarding

		status to institutions of higher education be given to UGC. 4. Establish National Council of Academic Awards and Accreditation (NCAAA) under UGC.
67	Liberal policy to be pursued for private sector	Through the pursuit of non-regulatory from the administration and removal of undue restrictions on establishment of private higher education.
68	Educational institutions set up by the private sector to be provided incentives.	Incentives for entrepreneurs in the form of loans, land grants and rebate on income tax, like industry.
69	Education zones and science parts to be established for promoting higher education.	

The above plan has attempted to tabulate in a clear fashion. Various actions which need to be taken by the government and its sub-ordinate bodies in order to give the country a viable system of Higher Education that will enable us to compete in this era of globalization. In some cases the agency which should be responsible for taking appropriate action has also been identified.

As was pointed out earlier that the system of 5-Year Plans has been discontinued by the government and replaced by the roll on planning process. It is strongly felt that the UGC must continue to plan for higher education at the national level. If this planning is not done then the development of the higher education system would be uncoordinated

and uneven. This is likely to result in the accentuation of disparities that exist between universities and regions.

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