HIGHER EDUCATION AT THE CROSS-ROADS OF THE TWENTIETH AND TWENTY-FIRST CENTURIES

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"Free Enterprise was born with man and shall survive as long as man survives".

— A. D. Shroff
1899-1965
Founder-President
Forum of Free Enterprise

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Dr. (Miss) A. S. DESAI*

I have been in higher education ever since I completed studies at the Tata Institute of Social Sciences, and started my career in the College of Social Work (Nirmala Niketan), way back in 1957, even before it was affiliated to the University of Mumbai. It was obvious, therefore, that I should select higher education as the subject of choice. However, the particular reason for selecting it is the crucial role that higher education is likely to play as we move from a century which focused on the development of material resources to one which will focus on a knowledge and information based society where the development of our human resource will be of vital importance.

A recent UNESCO document of the International Commission for the Twenty-first Century, titled Learning: The Treasure Within, states :

> **Higher education is at one and the same time one of the driving forces of economic development and the focal point of learning in a society. It is both repository and creator of knowledge. Moreover, it is the principal instrument for passing on the accumulated experience, cultural and scientific, of humanity. In a world where resources of knowledge will increasingly predominate over material resources as factors in development, the**

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importance of higher education and of higher education institutions can only grow. Moreover, the effect of innovation and technological progress means that economies will increasingly demand competencies that require higher-level studies. (Delors, 1996, p. 130).

This crucial role of higher education in fostering development, increasing the knowledge base and specifically in contributing to India's economic development, was well recognised by the founders of modern India. Within two years of having adopted its own Constitution and six years after Independence, the University Grants Commission (UGC) was established in 1953 and given a statutory status in 1956. There has also been tremendous growth in higher education, from a handful of universities for the elite to a large system with a tremendous investment, drawing to it students from many segments of society who never dreamed of passing through the gates of higher education several decades ago. Research in sciences and social sciences has led to numerous publications, affected policy in some sectors and contributed to new knowledge. There have been many outstanding scholars recognised for their work in India and abroad. Among the developing countries of the world, the Indian sub-continent can be proud of its achievements in higher education. Our university and college teachers have been teaching for decades many thousands of students who have made a mark, not only in their personal life, but especially in the life of our nation as well as in other countries of the world. In fact, Indians are becoming global as they are found pursuing professions and business all round the world in all the continents, a majority of whom have only the degrees of Indian Universities.

The UGC, the Department of Education at the Centre and those of the respective State Governments, have a major

responsibility to steer the course of higher education from the twentieth to the twenty-first century. We cannot afford to take our old baggage of problems with us. We have to address ourselves to solve our problems within a specific time-frame. Many of these problems are linked to the indicators of development of the concerned State in which the university is located. It is inevitable that the level of the socio-economic indicators of a State with respect to its finances, management, political sagacity, and such other related factors will, inevitably, be reflected in the level of functioning of the State University and its general performance.

India, today, is a society in transition with respect to its economy as also the political and social environment. There is an emerging desire to catch up with the world which is fast changing. Our capacity to meet the challenge will depend on how best and fast we respond to these changes. This is both an opportunity and a challenge. The next few decades will be most crucial in more ways than one. Strategies and development policies will have to be interwoven into a pattern which fits into the world trends and, at the same time, tackle problems unique to this country where a large population has not even had the fruits of development of the twentieth century when the twenty-first century is already on our door-steps.

Expansion of the Higher Education System - Quantitative Development

As stated earlier, there has been a very rapid increase in higher education since India's Independence when it had 20 universities and 500 colleges. On the eve of India's Golden Jubilee of its independence, that is, by 1995-96, we had 228 universities, of which, there were 15 Central Universities set up by Acts of Parliament, 164 State Universities set up by Acts of State Legislatures, and 39

deemed to be universities set up under the UGC Act. These 228 universities include 8 open universities and 33 Agricultural Universities. The remaining 11 are institutions of National Importance and 4 other independent institutions. The total number of universities have risen to 232 by 1998. Today, the UGC has purview over 184 universities, of which, 148 are recognised for our development plan grants - 140 general universities, 8 technical universities, besides universities for Medicine, Law, Fine Arts, Journalism and such professional subjects. There are, approximately, 9703 colleges, of which, 4935 are recognised for development grants as of 1997-98. While the largest number of colleges is in humanities, social sciences, sciences and commerce, there are 550 engineering and technical colleges, 655 medical colleges, nearly 600 management institutions and 700 teacher education colleges. In 1996-97, there were 3.2 lakh teachers, of whom, 77 per cent were in the affiliated colleges. There were 67.5 lakh students enrolled in 1996-97. It has become the second largest university system in the world.

However, this expansion of higher education in India has been poorly planned. There exist a number of subviable institutions and as many as almost 50 per cent of the 9703 affiliated colleges are not eligible for UGC assistance as they either do not fulfil the conditions for recognition under our Act (2 f) or, even if recognised, do not come under our grant (12 B) for want of minimum requirements such as the minimum number of students and staff. It is estimated that one college is established everyday, sometimes with the possible exception of Sundays, and one university is established every three or four months. Similarly, enrolment of students has grown at an exponential rate, particularly during the last decade, against a marginal increase in the strength of teachers. From 21.68 lakh students in 1972-73,

we have over 67.00 lakhs in 1996-97. The growth rate was 7.2 per cent in 1981-82 but it came down to 5.1 per cent in the recent years and appears to have declined to 5 per cent by 1996-97. Even in spite of this expansion, India has only 6 per cent of the 17 to 23 age group enrolled in higher education and lags behind even some of the other developing countries which have achieved enrolment of 10 per cent and more, such as Malaysia, Thailand and Singapore, while developed countries, like the USA, are aiming to go beyond 50 per cent.

A very disturbing feature has been the proliferation of the universities and colleges, mainly for general education, which have neither a truly liberal arts/science programme nor prepare for a career. A majority of the students (85 per cent) terminate at the bachelor's degree level and expect to find a job, but suffer only frustration.

The major enrolment, 88 per cent, is of undergraduate students in the affiliated colleges. Out of 9.4 per cent in post-graduate education, 56.5 per cent of this proportion are in the affiliated colleges. Only doctoral degree enrolment is, to a large extent, in the universities - 85 per cent (1995-96) - and they represent an enrolment of 1.1 per cent in higher education. The remaining 1.3 per cent are enrolled in diploma and certificate courses. Yet, our focus in higher education has been mainly on nurturing university departments, which encompass, approximately, 10 per cent of the student population in higher education. Therefore, we need to refocus our attention on the college sector, especially since it is the entry point for higher education. With the falling standards at the school level, especially schools funded by the Government, Municipalities, and Zilla Parishads, we may have to make more massive inputs at this level, including remedial teaching and better infrastructure such as science laboratories.

Moreover, the enrolment at the under-graduate level is mainly in the Humanities and the Social Sciences (40.4%), followed by Commerce (21.9%), and the Sciences (19.6%). The question is how this bulk of 82% per cent of the students can be facilitated to achieve at least a minimum level of competencies for moving into the employment market or in self-employment. The major professional courses absorb only an infinitesimally small proportion of the student population, that is, 18.1 per cent. In order of enrolment, these are: Law (5.3%), Engineering (4.9%), Medicine (3.4%), Education (2.3%), Agriculture (1.1%), Veterinary Science (0.3%), and others (0.8%).

The issue, today, is of increasing access to higher education, and the opportunities it provides, as much as reconciling quantitative expansion with relevance and quality. As education is a concurrent subject, the UGC Act does not provide for controlling expansion nor for assuring that only qualitatively sound institutions are established in the States.

Access and Equity

The growing population of our country has had an inevitable effect on the problems of access in the education system. Not only is access a problem at the primary school level but, in India, as shown in the earlier section, it is extremely poor at the level of higher education with only about 6 per cent of the relevant age group of 17 to 23 enrolled. In spite of it, there has been a contradictory perception that there is greater outlay for higher education than other levels of education. The ASEAN countries are acknowledging that, while they rightly emphasized primary education, in fact, it is not enough for realizing the objectives of development of their own countries and have begun to remedy this situation.

Hence, we need to change our false perception that our country cannot afford higher education. On the contrary,

our country cannot afford not to invest in it if we are to be both self-sufficient and nurture an educated leadership and professionals in all walks of life to lead our nation in the twenty-first century. Generally, the corollary to this issue of expansion of the system of education is the cost and the mobilisation of resources. The issue is not so much of the reallocation of resources within education from one sector to another but one of adequate allocation to the sector as a whole, which would require a reorientation of other national policies.

Connected with this issue of access, is the burgeoning youth population from 1947 to date. Yet, there has been little, if any, planning to accommodate the huge expansion in the age group in terms of sheer numbers let alone the increase in the actual percentage enrolled which has remained stationery over the same period. In all other Ministries, expansion of infrastructure, and reaching larger population groups, is always the priority in planning. It has never been the priority in planning for higher education. Moreover, in the absence of alternative systems in education for acquiring vocational skills, and a poor employment market, the pressure on entry into the university system, has increased doubly. All these factors have resulted in the nature of pressures on the system. While the number of universities and colleges has increased, the growth has been unplanned as it is not necessarily based on considerations of need on the basis of location, or type of courses to be offered, consistent with local requirements. There is a concentration of higher education in some areas leaving others underserved and without reference to actual human resource planning required for the development of the country. The development of data systems, for effective planning, needs our special consideration.

Women constitute only one-third of the enrolment. Though they are over-represented in the humanities and social sciences, they are almost equal in the sciences with males, a little less than males in commerce, but less than 13 per cent in courses in technology. We have five women's universities and 1195 women's colleges. Besides women, there are different types of groups we have not adequately reached in the system such as backward minority groups, other backward groups like the marginal farmers, casual labour, migrant families, those in the reserved categories, those living in the backward areas of the country, the displaced by "development" and the disabled. Even though they may have completed school education, they have few hopes of moving into any type of tertiary education, either vocational or university. Strategies for bringing them into the mainstream are required to be considered if our system of education is not to result in a polarised social structure for the twenty-first century.

The Delors report states :

> **The primary aim of education systems must be to make children from marginal or disadvantaged backgrounds less socially vulnerable, so as to break the vicious circle of poverty and exclusion. The handicaps that school children are suffering from must be identified, handicaps that are often linked to their family backgrounds and policies of positive discrimination towards those who are having the most difficulties are needed (Delors, 1996, p. 135).**

The above quote equally applies to students in higher education.

Quality

Like access, quality also merits our consideration. To maintain quality, three inputs are required. In the first place, the quality of preparation at lower levels impacts on the students who enter the educational system at higher levels. We have provided mass education at lower levels without adequate emphasis on quality. As a system expands, it absorbs a population of students who come from a wide spectrum of socio-economic groups. The "massification of education" has occurred in India at the lower levels of education which feed into higher education. The quality of that education impacts on higher education. Inevitably, therefore, the higher education system has had to cope with the problems of a very diversified student body from first generation learners to those from professional and higher income families whose children are exposed to many other opportunities besides formal education in expensive schools for the elite. The first generation learners have mostly attended the publicly funded schools with far poorer preparation than the latter who patronise the private institutions. Thus, the whole debate of admission to higher education of those who "merit" such admission has been rendered meaningless since it is not the innate capacities of the learner but the socio-economic factors that have determined his or her performance at lower levels for access to higher education.

Moreover, as a growing number of students enter from the publicly supported system of school education, it also impacts on the quality of the higher education system with problems in maintaining necessary standards without providing the infrastructure for remedying the past educational deficits. Hence, increasing access and decrease in quality have been major issues confronting higher education especially in all developing countries with a very

large young population and straightened governmental resources.

While increasing access at entry levels for first generation learners, through public supported funding of school education, we needed to put in even greater qualitative inputs than those for students from more advantaged backgrounds. However, the opposite has occurred, with the elite having access to qualitative school education. The result is that it has deeply impacted on the entrants of the higher education system from this lower level mass education system in terms of lack of preparation in knowledge, skills and conceptual thinking, especially in language, mathematics and science.

Education can have a great role to play in decreasing social disparities between groups and in promoting social mobility. For instance, the tremendous expansion of the middle class in India can be confidently attributed to the investment in education, especially in higher education, (which the multi-nationals now want to exploit). We, therefore, can ill afford not to invest in this vital sector of our economy.

Moreover, quality requires attraction of the best human resource to teaching. While teaching at the higher education level was, at one time, a most desirable profession, it has lost its attraction over the decades with the advent of other alternatives which tend to be more lucrative such as the civil service or industry. We cannot expect our brilliant youngsters to be endowed with ideals of service only without at least those economic rewards available in the salaried public service sector (not public sector companies). Today, economic liberalisation, and the lifting of curbs on the salaries of the private sector, have further exacerbated this problem as there are substantially lucrative jobs elsewhere.

To make the situation even more difficult, the decrease in infrastructure resources to the higher education system has affected the academic environment for serious pursuit of teaching and research. The UGC has taken many initiatives to improve the quality of teaching through various schemes, such as its Academic Staff Colleges for orientation and refresher courses for college and university teachers, Special Assistance Programmes for Departments to achieve excellence, funding for major and minor research projects, junior research fellowships for the Master's degree graduates to pursue the Ph.D., teacher fellowships for college teachers, establishment of inter-university centres to share expensive facilities such as the Nuclear Science Centre in New Delhi and the Centre for Astronomy and Astrophysics in Pune, and many such schemes. In spite of it, the problem of quality remains because all policies are not synchronised to achieve the intended goals. Poor attraction to teaching and research on account of salaries and other benefits and poor institutional physical infrastructure, both of which are largely provided to their respective Universities by State Governments, leads to the loss of quality and achievement of standards.

Relevance

The UGC recognises that the new global scenario poses challenges for the higher education system which it has not had to face in its history. In its IXth Plan document, it states :

> **... the need of reconciling the new global emphasis on the market economy with the United Nations' pronouncements on promoting sustainable development and the survival of its human population at an adequate level of the quality of life, demand a whole range of skills from the**

graduates of humanities, social sciences, sciences and commerce, as well as from the various professional disciplines such as agriculture, law, management, medicine or engineering. We can no longer continue the model of general education as we have been persisting in for the large bulk of the student population. Rather, it will require a major investment to make this large human resource productive by coupling the older general disciplines of humanities, social sciences, sciences and commerce to their applications in the new economy and having adequate field based experience to enhance knowledge with skills and develop appropriate attitudes. (UGC, 1996, p. x).

A major problem has been our narrow focus on knowledge, that too not necessarily holistic, integrated, inter-disciplinary, or up-to-date. It has led to the exclusion of emphasis on development of skills or attitudes and values in the learner. Another problem is the lack of a stated mission for the institution, a vision of what it wishes to achieve, so that, all its activities and its sub-systems of teachers, other staff and students, strive towards a common goal in a joint partnership. Each University and college needs to define its mission and its vision and tailor its programmes, accordingly.

We need to introduce not only new courses, but to modify our existing ones to include an application orientation along with the theoretical base. For example, science courses can develop industrial and agricultural related applications in physics, chemistry, botany, and zoology. In 1994, the UGC introduced such applied, career oriented courses at the bachelor's degree level, constituting one-third of the total degree, running through the three years, including hands-on experience in the world of work, and suitable for degrees in all the faculties of the university. However, for want of funds, the demand far outstrips the ability of the

UGC to set up these programmes. At present, there are, approximately, 1700 courses, in 1382 undergraduate colleges, and 32 undergraduate departments of universities (1998-99).

Among the social sciences, political science students can be attached to administrative and political bodies in the Government from the panchayat upwards and in the many autonomous organisations of the Government. Sociology students can be placed with urban or rural cooperatives and other development agencies. Psychology students can be placed in schools, colleges, primary health centres in rural areas and industrial organisations. The communication field is growing at an exponential rate. Besides the hardware technicians, it needs researchers and script-writers, producers and directors, who could be from the humanities and social sciences. Language students can be given experience in a whole range of activities related to publishing, proof-reading, printing and journalism. The possibilities are endless. Many course options should be available, offering a cafeteria-style selection of courses to students, to make up specialisations related to their interests and needs.

Most of the current courses, including those which are career oriented, are designed for an urban and industrial environment, but our country still has a largely rural population which has to cope with very different realities. We need to focus on and design courses which are more appropriate for our colleges in semi-rural and rural areas, backward districts and those located in hilly and remote areas - constituting, probably, about 30 per cent of the colleges in the country. In a recent modification of the UGC career courses, there is a tie-up with the ICAR to introduce from the academic year 1998-99, rural oriented courses such as Animal Husbandry, Sericulture, Hill Agriculture, Soil Conservation and Water Management. Such courses would

equip the students to be involved in the much publicised programmes of rural development of our successive Governments, through employment and self-employment, and also impact on improving the traditional occupation of the student's family.

It is not adequate to modify classroom learning only but the curriculum must provide for a "hands-on" experience in organisations and industries which can provide the requisite training to the students. It is too expensive to continue to replace equipment in the colleges and universities, as obsolescence occurs in a very short span of time. Even the existing courses can be made parallel to field placements such as the commerce courses. The students can be placed in banking and insurance industries, and a host of business organisations. To achieve it requires a better response from industries and business than it has been possible so far.

While specialisations have had their day, it is increasingly getting recognised that knowledge cannot be contained within the various subject boundaries. A student studying the sociology of development may also need to understand the economics of development, or the new liberalisation policy in order to understand its effects on society and, through creative literature, such as short stories, novels and poetry, understand society and its problems. A student in literature may take a course in women's studies or on social problems in sociology. Thus, we need to free our students to build specialisations of interest in a problem area. We need to help build knowledge differently. Instead of specialisation in a discipline, we need to evolve problem-based specialisations of concern and interest to students. This means that our teachers will also have more interaction with their colleagues in other disciplines, and view knowledge from a spectrum, seeing all the interconnections so that many new designs of the curriculum and research emerge as in a kaleidoscope.

With the emergence of a new economy, the universities will have to undergo a rapid modification to reflect the demands on it by the users of the system, that is, the public at large, the employers, and the beneficiaries, including the students and their parents. The need of the hour is to provide a scheme of curricula which allow for a number of options to the students with respect to both academic and career oriented courses which have field based experience in the world of work built into them, and several entry and exit points, as well as for taking them in a mixed mode of distance and conventional education. We need not have rigid differentiation between our conventional universities and the newly emerging distance education universities. Students should be able to opt for some credits in the distance education mode, and the university, itself, can offer some courses in that mode. It would relieve classroom pressure if some of the credits can be taken off campus in subjects that do not call for classroom, face-to-face instruction, which they can take in the open university and transfer the credits, or take them in their own university.

Impact of Globalization on Research in the Universities

In the last decade of this century, we have witnessed phenomena never envisaged earlier. The breakdown of the Berlin Wall symbolised the breakdown of all national barriers as economic changes swept the globe. The strengthening of market economies and, consequentially, the "mantra" of liberalization, followed by treaties such as WTO and the issues related to intellectual property rights, have affected our respective countries as also our universities. Besides the fact that our industries have to wake up to a new economic order, there is also an onus on them to maintain their competitive edge both within the nation and globally. The need for R and D has become very evident but not all

industries can afford to maintain separate structures and investments, especially the medium and small scale industries which can link themselves to the universities for undertaking their research. Universities have been involved in research and a large number do have considerable investment in human resource developed over the years and, also, in infrastructure through the UGC, the Department of Science and Technology (DST) and other Government organisations. While industry wants short-term research with quick results, universities have normally been involved in basic research which is essentially of a long-term nature. Hence, there is a need for both to appreciate the other's requirement and be capable of achieving the goals of developing a strong indigenous base of R and D. Universities have, among them, persons who command the respect of their peer group in the laboratories which exist outside the university system in India and abroad. Besides, unlike laboratories, universities have a continuous supply of young people who have enthusiasm and provide a fresh perspective with new insights.

Furthermore, universities have long undertaken research and published because not to publish was to perish. Now to publish is to perish unless the intellectual property rights are defended. To do so requires educating our researchers on the issue of intellectual property rights as also to give them the necessary financial and legal help in the university system. These are all new to the university system, and will have to be fully addressed by us.

In the area of social sciences, policy oriented and interdisciplinary research is required in the various sectors as Governments and other organisations need direction for social change through field data. The undue emphasis on science and technology, to the exclusion of the value based

humanities and the theory and data based social sciences, will lead to a very large gap not only in planning and social development but also in the fastest growing service sector of our economy.

Funding

In a recently concluded UNESCO World Conference on Higher Education (Paris, 5-9 October, 1998), the assembly finalised a document entitled, "World Declaration on Higher Education For the Twenty-First Century - Vision and Action". Article 14 is on "Financing of Higher Education as a Public Service", It states :

(a) **The funding of higher education requires both public and private sector resources. The role of the state remains essential in this regard. Public funding for higher education reflects the support that society provides to higher education and must be further strengthened to ensure the development of higher education, increase its efficiency and maintain its quality and relevance. However, (sic), public support for higher education and research remains essential to ensure a balanced achievement of educational and social missions.**

(b) **Society as a whole must support education at all levels, including higher education, given its role in promoting sustainable economic, social and cultural development. Mobilization for this purpose depends on public awareness and involvement of the public and private sectors of the economy, parliaments, the media, governmental and non-governmental organisations, students as well as institutions, families and all the social sectors involved in higher education.**

It is with great relief that such a definite statement has emerged from UNESCO on the role of the public sector in higher education, for, due to incorrect assumptions, this sector has been suddenly starved of funds, from the early 90's. Possibly, there are a few universities which are not in debt. However, for the majority it has been a traumatic period due to very faulty interpretations of the role of higher education in national development. As a result, the quality of infrastructure has greatly deteriorated such as on repairs and maintenance, repairs and replacement of equipment, and purchase of library books, journals, and materials for laboratory experiments. With the devaluation of the rupee, these costs have gone up since some books, journals, and equipment are imported. Hence, maintenance grants for universities and colleges largely cover only the cost of salaries leaving little for academic needs.

There has been a severe decline in Plan funding, which helps in infrastructure development, and this has compounded the problem. The decline has been severe from 25 per cent of the budget of the Department of Education at the Centre, in the IVth Plan, to a decline in each subsequent plan - 22 per cent in the Vth and VIth Plans, 16 per cent in the VIIth Plan, to half of even that, 8 per cent, in the VIIIth Plan. The IXth Plan is not yet finalised. Hence, at present, we are receiving annual allocations far below our requirements.

The role of education in socio-economic development has been universally acknowledged, but lip service has been paid to supporting it. It is also a well established fact that higher education contributes towards the development of competencies required by a nation in all aspects of life. It is higher education which prepares the human resource for the professions, for the administrative and defence services, for business and industry, for teaching and the health

services, and for leadership in all walks of life. Yet, during the period of the United Front Government, the Department of Economic Affairs, Ministry of Finance, Government of India, brought out a "Discussion Paper" (May 1997), based on the Budget Speech for 1996-97, which had promised *"to place before the House a discussion paper on subsidies"*. This paper could have very far reaching negative consequences on higher education.

The paper was a study by the National Institute of Public Finance and Policy in which it divided merit and non-merit goods or services for the purpose of deciding which items deserved subsidies. Thus, education beyond elementary level, electricity, diesel and fertiliser were classified as non-merit goods and services, because the benefits of the subsidies accrue primarily to the recipients while in primary education, public health, social welfare and sanitation, the benefits spread well beyond the immediate recipients. (GOI, DEA, 1997, p.6). The authors claim that the "subsidies are advocated when the social benefits of a particular service or commodity are greater than the sum of private benefits to the consumers".

The above argument is based on World Bank policy pronouncements one of which is quoted below :

> **Indeed, it is arguable that higher education should not have the highest priority claim on incremental public resources available for education in many developing countries, especially those that have not yet achieved adequate access, equity, and quality at the primary and secondary levels. This is because of the priority that countries attach to achieving universal literacy; because the social rates of return on investments in primary and secondary education usually exceed the returns on higher education; ..... and because investments**

in basic education can also improve equity because they tend to reduce income inequalities (World Bank, 1994, p.3).

Presumably, different limbs of the World Bank do not see eye to eye with regard to their own policy pronouncements, because the assumption that primary education will exceed returns on investment compared to higher education and reduce inequalities, is contradicted by another statement of the World Bank.

Higher education is of paramount importance for economic and social development. Institutions of higher education have the main responsibility for equipping individuals with the advanced knowledge and skills required for positions of responsibility in government, business and the professions. These institutions produce new knowledge through research, serve as conduits for the transfer, adaptation and dissemination of knowledge generated elsewhere in the world, and support government and business with advice and consultancy services. ..... The development of higher education is correlated with economic development: enrolment ratios in higher education average 51 per cent in countries that belong to the Organisation of Economic Cooperation and Development (OECD), compared with 21 per cent in middle-income countries and 6 per cent in low income countries. Estimated social rates of return of 10 per cent or more in many developing countries also indicate that investments in higher education contribute to increases in labour productivity and to higher long-term economic growth, which are essential for poverty alleviation (World Bank, 1994, p.1).

The above statement of the World Bank makes it amply clear that, in fact, primary, secondary and higher education play complementary roles in national development, yet, it expects developing countries to invest less in higher

education. In today's world, we cannot accept the World Bank's remedy, at least in our specific Indian context, of serialising or phasing the development of the education sector. Unlike the East Asian countries, Africa and the Middle East, India has already heavily invested in the higher education sector and, in fact, provides opportunity for students from Africa and East Asia, especially Malaysia, and some middle eastern countries, to study in India. Our developing countries cannot wait. They have to leap frog into today's competitive world or stay marginalised. They cannot wait for each phase to be accomplished or else our economy, social infrastructure of health and education, and scientific and technological research, will not be sustained. Moreover, to believe that higher education has greater rates of individual returns than social rates of returns, is to forget that the country has not only many achievements to its credit due to a critical number of the educated, but its technological, professional, business, industry, civil and defence services, are drawn from it.

In our country, a sizable proportion of students in higher education are drawn from the social sectors which suffer from social and economic handicaps, that is, the scheduled castes and tribes, some of the backward castes, and rural youth who join the colleges located in district and taluka towns. To think, therefore, that only the affluent benefit from higher education, is to lose sight of the facts of our socio-economic fabric. If India boasts of a large middle class today, possibly as large as the whole population of Europe, it has been made possible by the gradual spread of higher education. Given the opportunities created for professional development and general education, Indians found a means to capture the potential in India's economic development after independence. In spite of it, as pointed out earlier, the enrolment of the relevant age group in the population is barely 6 per cent when the USA has reached 51 per cent.

Not finding a niche in our own country, in its better universities and other institutions, students are finding that they have to go abroad to seek education. It will be a sad day for our country if our students have to pay much more to seek education elsewhere for want of opportunities closer to home, when India was one of the few British colonies to have a higher education sector established even prior to independence.

With only 6 per cent of enrolment in higher education, of the relevant age group, the Government of India Discussion Paper suggests raising fees so as to lower these enrolments further, which could have the likely effect of excluding India from all the acknowledged benefits of higher education described by the World Bank in the above quotation. Moreover, the gap between the OECD countries, with 51 per cent enrolment, and India with 6 per cent, is already huge. While, in India, sheer numbers may be large, the issue is not a numerical one but of the proportion of the educated in the population. Hence, any further curtailment will drastically limit our ability to hold our own in the global competition which requires skills of an order much beyond school education.

The classification of higher education with non-merit goods and services, possibly emanates from the nature of the assumptions made by the World Bank. In the first place, it is correct that higher education, by its very nature, requires higher per head expenditure. However, it is also true that very few countries have achieved cost-sharing in education as a whole. In countries of the OECD, public sources for educational funding in 1991, were as high as 99 per cent in Denmark, 98 per cent in the Netherlands, 93 per cent in Ireland, 90 per cent in Canada, 85 per cent in Australia and 78.6 per cent in the USA. Among low and middle income countries, it is 89 per cent in India, 62.8 per cent in Indonesia

and 62.2 per cent in Kenya (World Bank, 1995, p. 54). Till recently, Great Britain had no fees up to the bachelor's degree, for its own students and even now it is minimal. In France, it is practically negligible. Hence, in fact, it is the low and middle income countries which have lower public outlays on education, with greater payment from the users, as compared to the high income developed countries. Most countries are only now looking at the cost of education and the need to increase cost sharing with the users, especially in higher education.

The World Bank document on "Higher Education" espouses loans in lieu of increased fee but shows the poor recovery rate. It states :

> **Experience to date with existing loan schemes in about fifty industrial and developing countries has been disappointing. Because of heavily subsidized interest rates, higher default rates, and high administrative costs, the financial performance of loan schemes has been unsatisfactory. But the experiences of Colombia and the Canadian province of Quebec, for example, show that it is possible to design and administer financially sustainable programmes. (World Bank, 1994).**

If the experience of giving loans has been disappointing in 50 industrial and developing countries, its applicability is very doubtful in a country of the size of India and a student population in higher education alone which is larger than some nation states in the World (6.7 million).

The National Policy on Education, 1986, revised in 1992, had promised to commit 6 per cent of the GDP to education. Several Governments have come and gone but the percentage at the Centre remains a poor 3.7 more than a decade later. The Justice Dr. D.K. Punnayya Committee,

appointed by the University Grants Commission, submitted a Report (1992-93) entitled "UGC Funding of Institutions of Higher Education" which states that the Government cannot give up its responsibility to the higher education sector.

> **The State must continue to accept the major responsibility for funding the essential maintenance and development requirements of the universities.**
>
> **Although primary education is fundamental to the nation, higher education determines its entire development including academic and technological progress. While it is mandatory that the nation achieves universal elementary education and total literacy, at the same time, we cannot afford to neglect and relegate to a neglected position our quest to achieve global standards of higher education.**

However, the Justice Punnayya Committee Report has also laid an expectation that the universities will increase their earnings, within a lead period of 10 years, to about 25 per cent. It should be possible to expect a contribution of 15 to 20 per cent of the cost of education from the students through fees, at least among those who can afford the cost of their education, and another 5 to 10 per cent could be generated by the university through other internal sources, rationalisation of expenditure, and from external sources. Our mind-set about what higher education should cost the individual needs to change. We do need to raise fees to reasonable levels which reflect current costs of education linking these with the ability to pay. Students should pay for the cost of their hostel accommodation and electricity, so that, hostels can become self-sufficient. Today, in some universities, students pay hostel fees lower than the more disadvantaged slum dwellers. The food the student eats

should be fully paid for by him/her besides contributing to overheads such as, at least, partially meeting the salaries of the mess staff. At the same time, the country will have to find an answer to subsidise those who come from the less advantaged sections, as higher education leads to upward social mobility and decrease in poverty. If global challenges are to be met, we will need more of higher education and not less, and we will need to make such education relevant as also qualitative to respond to this challenge. Our emphasis on educational costs, as investment, have to be matched by greater levels of efficiency in fund management and raising of resources while curtailing expenditures which do not impact directly on the central tasks of teaching, research, extension and field action.

However, it is also to be recognised that, even in the USA, fees are only 25 per cent of the expenditure in public higher education institutions. In China, it is less than 10 per cent, and Japan less than 5 per cent. (World Bank, 1994, p.42). Hence, the Indian scene is not too atypical as we are sometimes led to believe. Moreover, even in the USA, enrolment in private institutions is only to the extent of 25 per cent. (World Bank, 1994, p. 35).

In fact, as such costs of education go up, we need to apply our minds to the way students in need can get a subsidy. In the Australian system, there is a concept of deferred payment, which means that the student starts paying back on graduation only when the income from earnings reach the national income average and the payment is done through the tax system. However, a student who pays fully during the period of education, can be given a rebate. This system does favour the advantaged affluent sections since only they could pay the full fees resulting in inequities. The best system would be to link our repayment to the tax

system, regardless of whether we pay income tax or not, and repay over one's life-time based on the type of degree obtained and the individual's income. It would certainly broaden our financial base in education.

Effectiveness and efficiency must become our bye-words. We have responsibility for the trust reposed in us through public funds. We need to find ways to respond to the critical view of higher education by the public at large, and to develop its capacities for providing education which impacts on national development and initiates change. Only as the social value of higher education is demonstrated, will it attract greater funding from the public as merit goods and services.

Relationship of Funding to Global Competition in Higher Education

The results of the decline in funding are not far to see. National policies impact on education. Hence, there is no use in blaming higher education without identifying the factors which concurrently affect it, and need to be identified. Systems impact on each other. Today, many foreign countries are vying to woo our students particularly because the pool is large and English speaking. U.K. and Australia have been particularly targetting our student community. Not only are they recruiting students for universities in their own countries, but setting up programmes in India, sometimes by twinning and other times through their representatives. Like industry often claims that our policies do not provide a level playing field, it is similar with the university system. It is an irony that, starved of funds, it is required to stand up to global competition. We may have some way to regulate to see that only the quality foreign institutions set up their programmes in India, so that, our students are protected from "fly-by-night" institutions. However, in this age of

globalisation, it is not possible to fully keep out the best or even appropriate to deny such access to our students. Instead, we must provide the qualitative infrastructure as also attract the best to the teaching profession. Only then, we will stand the competition.

Changing Role of Higher Education

The University has a major role to play in national development, not only through its degree and diploma courses, but also in meeting the needs of the community which supports the higher education sector. We need to break out of the four walls of our academic structure to reach out to the community. Knowledge is not static. There is a tremendous explosion in knowledge. We need to reach out to our graduates in numerous continuing education programmes, especially to equip them with skills they require which we have either failed to provide them through the education system or because of the demand for re-skilling by the changes in the socio-economic environment.

Beyond our concerns for those who, in any case, have the eligibility for entry into the educational system, we need to provide a broad spectrum of extension education to people who will never enter our system - women, factory workers, farmers, small scale entrepreneurs, school dropouts, and a host of others who are waiting out there for the university to extend itself through its bank of knowledge and skilled human resource.

Finally, the university must make a difference to the quality of life of its people if they are to want to support the system. Its legitimacy will come from the people, as also its material support, if the university devotes some of its time and effort to make a difference to the problems the community faces. With its vast human resource, the university can play a significant role in identifying an issue or a problem which

exists in its immediate neighbourhood and bring all its academic resources and skills to bear on it, be it health, enrolment and dropouts in primary education, street or working children, pollution and other environmental problems such as watershed development or wasteland development, appropriate technology requirements, and a host of such activities. The higher education system will legitimize itself only when its mission and vision relate to the commitment it must have to share its knowledge and skills with those who would not ordinarily benefit from its educational offerings.

Systemic Change

Finally, the problems of a system are within itself as well as outside it as it interacts with other systems and they impact on it. While the universities turn out managers for business and industry, little attention has been paid to make its own managerial system both efficient and effective through programmes of human resource development for its administration, most of it much larger than that in industry or business. Some of its management bodies need to be modified for quicker and more professional decision-making. Its span of control is too large with many affiliating colleges, at times from over 100 to 400. It suffers from an overload as an examining body. The system of examinations is an outcome of the size of the system. When it has to examine lakhs of students, it is also not possible to provide continuous and cumulative evaluation. It is largely based on memorization of facts, more of them outdated as the syllabus remains fossilized because it is difficult to introduce change in such a large, over-sized system. Hence, such a system spawns guide books and teaching shops. We cannot get rid of the latter without the former.

The twenty-first century must witness a change in the structure of universities with affiliating colleges which has gained gigantic proportions, far greater than the British would have envisaged it when this system was introduced by them and which they have abandoned in their own country. The span of administrative management needs to be reduced by starting with autonomy to the colleges. The teacher at the college level must be empowered to develop the course, plan the learning-teaching methodology, and decide on the best means of evaluating the student's knowledge, skills and attitudes. Today, we have only 123 such colleges in a few states and 50 per cent of them are in Tamil Nadu. In a recently concluded conference of these colleges, organised by the UGC, it was clearly evident that the flexibility they enjoyed allowed them to develop relevant courses, introduce a variety of teaching methods and methods of evaluation, as also a host of complementary co-curricular programmes. The teacher becomes, then, a responsible agent in the system and the accountability of both the teachers and management increases. However, due to the objections from various quarters, on grounds not fully borne out by facts, the scheme has languished. It is beginning to pick up. We hope that the twenty-first century witnesses a major change in the management of the university system, making it more decentralised and democratic.

Moreover, students make no demands on the performance of the system. Their demands are, generally, for such requirements as postponement of examinations or admission of students to higher classes who have not passed the required number of subjects. There is not much concern if a teacher chronically comes late to a class, does not engage a class or has outdated knowledge, relying on past notes.

While parents show concern for their wards, when they are in school, they are remarkably absent from the higher education scene. Hence, there is no pressure from the beneficiaries of the system for performance. Public debate on education is non-existent and it has little or no place in party manifestos. Campuses do not invite the party candidates, at election time, to quiz them on their agenda for higher education. Unless civil society begins to voice its concern and plays also an enabling role, education will remain a poor cousin in the national priorities. There is hope only if the teachers' associations take on a new role for themselves, that is, to focus on the qualitative improvement of the system and its relevance to societal needs.

The political system has also impinged on the higher education system, whether it is in appointments or in the formation of associations affiliated to political parties. Democratic structures of governance would obviate their need. However, as long as such democratic structures do not exist, certainly, the right to association has to be exercised on campuses by students, teachers or other staff, but these should be based on campus issues, especially related to its academic concerns, and not be governed by political considerations as it has led to disastrous consequences of turmoil on the campus and even some murders at the time of student elections. A person has a right to belong to a political party as a citizen but the university is not the place for its expression, although many of our parliamentarians and ministers were one-time student or teacher leaders. Political appointment of Vice Chancellors further exacerbates the situation as they are viewed as partisan entities, or their selection may not be necessarily based on their academic credentials.

Conclusion

I conclude with a strong belief that our universities are sleeping giants. Awakened, they can make a vast difference in transforming our society and bringing it to the twenty-first century, especially for our large populations which have not even tasted the fruits of the twentieth century. We have great potential. Our teachers are second to none. Many of our students and teachers have made a mark in the universities abroad. The future of our country is in the hands of our teachers, not only in the formation of our students, but also in impacting on the nation and its development by nurturing its culture, value for human life and environment, social justice and equity in a pluralistic society within the context of sustainable development. However, all this can happen when there is also an academic, political and administrative will to change the present structures of the system and see education as an investment and not as expenditure.

A. D. SHROFF
(1899-1965)

A. D. Shroff's achievements in the fields of business, industry and finance were many and varied. A large number of enterprises owe their origin and development to him. As an economist, his predictions have proved right over the years. Through the Forum of Free Enterprise, which he founded in 1956, as a non-political, educative organisation, he sought to educate the public on economic affairs. It was his firm conviction that a well-informed citizenry is the foundation of an enduring democracy.

George Woods, former President of the World Bank, paid the following tributes to A. D. Shroff :

"In every age and in every society men must express anew their faith in the infinite possibilities of the human individual when he has freedom to develop his creative talents. For this is in large part how the message of freedom is passed from generation to generation. A. D. Shroff spoke eloquently in a great tradition, and thanks to him we can be sure that other great men of India will continue to speak this message in the unknown context of our future problems."

"People must come to accept private enterprise not as a necessary evil, but as an affirmative good".

— **Eugene Black**

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