

Higher Education

G.D. SHARMA

BACKGROUND

The early 1980s witnessed: (a) developments in science and technology; (b) change in governance of nation states, and (c) economic reforms throughout the world. The education system, and in particular, the higher education system—which significantly influences the science and technology development, reforms in governance and social and economic policies—became a matter of enquiry and analysis. In India, the early 1980s witnessed the need for improvement in the quality and relevance of higher education. As a key input in the quality, the improvement of the status of teachers and their contribution become a matter of enquiry. Two Commissions were set up on teachers in school and higher education, in 1981-82. They attempted research studies to analyse the status of teachers and their role in improving quality. The Commission on Teachers in Higher Education attempted research studies to analyse various aspects of the teaching profession. These studies pertained to the system of higher education, social status, economic status, recruitment, professional and career development, participation in decision making, redressal of grievances and professional values of teachers in higher education (Raza, M. et al., 1983).

Along with this, the issues of 'brain drain', unemployment of graduates, relevance of the curriculum, academic freedom, autonomy and

accountability, and the regional developments in higher education were the subject of enquiry by doctoral scholars and by faculty members in the institutions of higher education.

In the area of equity, the participation of SC/ST and women students, development of higher education in the regions, and the analysis of disparities have been the themes of the studies. Academic freedom, autonomy and accountability, private management, state financing of institutions of higher education, unit cost analysis, wastage and stagnation, students' and teachers' participation in politics, and the working of apex and state-level organisations have been the subject of study in the area of efficiency of the system. Innovations and changes, and the role of institutions of higher education to cope with the changes in technological developments have been another area of research.

In fact, in the mid-eighties, when policy formulation was attempted, a critical analysis of all the levels of education was carried out. In the area of higher education the issue of equity and quality have figured simultaneously. The issues of academic freedom, autonomy and accountability, resources, and the efficiency of the system, became very crucial. In the area of efficiency, issues of accountability of teachers and planning and management of institutions become central. Research projects and research papers focused on these issues. A series of studies were conducted as an input into the

formulation of the National Policy on Education, 1986 (NIEPA, 1986).

INTERNATIONAL TREND

In the context of the changing situation in Europe—particularly economic reforms in the erstwhile Soviet Union as well as the reunification of Germany—several issues pertaining to quality and relevance of higher education were raised. The aspects of academic freedom, tenureship of faculty and autonomy and account ability also became the themes of research in the developed countries. The issue of scarcity of resources, both in developing and developed countries, for higher education became a matter of enquiry. Coupled with this was the issue of demand on institutions of higher education to cope with the changing technology.

The issue of dominance of institutions and the knowledge developed in Western countries and Europe on the Third World received attention by the scholars in the developing countries. This was particularly through funding of research projects and institutions. The issue of colonial traditions in institutions of higher education of the Third World, say in Latin America and Africa, occupied the attention of researchers. Staff development to cope with the changes in knowledge, technology and R&D also became a matter for research and action in a good number of many countries of the world.

The review of researches in higher education in some of the countries revealed the following.

An inventory of research conducted by UNESCO, revealed that enquiry into the higher education system is rather recent and was started about 20 years back in the USA (UNESCO, 1986).

In the USA, in the recent past, "inquiries focused on students" deficiencies in basic-skills, student involvement in learning, performance feedback, and curricular content and structure, all with the aim of reformative intervention. Researchers developed new technologies in test-

making, new models of learning and development, and more complex theories that demand multi-method approaches accounting for not only quantitative test outcomes, but also qualitative classroom and institutional environments. In consequence of this greater complexity and richness, interpreting the results of assessment has become more problematic, and potentially leads to errors in high-stakes decisions, such as denial of funding. This is particularly true when assessments designed for one purpose are used for another. Researchers are beginning to call for attention to the need to consider the consequences of assessment interpretation and to re-invest assessment with its original purpose and values: the understanding and improvement of collegiate learning" (Ewell, P. 1991).

In Hungary, researchers attempted to address the issue of the shift from centrally planned to free market economies in Eastern European countries, as it meant education's contribution to the successful economic competitiveness of these countries. "Planners are attempting to address such issues as institutional freedom in decision-making and curricular control, expanding student opportunities for education, and the development of private universities" (Freeman, K. 1991).

In Vietnam: "Current research in higher education concentrates on problem-solving projects involving 'technical innovations and their application in the community or industries'. There is a critical need for systematic research on all issues related to higher education itself, with priority given to curriculum development and teacher training" (Hua, T.P. 1991).

In China the issues of research are: "mechanisms within the university that control S&T research and dissemination, the limitations that ought to be placed on direct involvement by university personnel in S&T exploitation, an analysis of the types of products on which S&T research ought to concentrate, the interaction

of S&T research with other academic spheres of the university, cooperation between domestic and international S&T enterprises, relations between the products of S&T research and the actual markets for these products" (Lianqing, Q. and Hongming, H., 1991).

With regard to the general status of research in higher education in the world, Altabach remarked that "there is a contradictory situation in research on higher education in which knowledge about the condition of higher education varies widely around the globe. Beyond basic statistics about such aspects as numbers of institutions and student enrolments, there is little comparative research and analysis on a variety of important contemporary topics, compounded by the disequilibrium between industrialised nations and the Third World" (Altbach, P.G.A., 1991).

Though the focus of research in developed and developing countries and among the erstwhile socialist countries varies, the issue of excellence and relevance remains a common one; though of course, with differences of degree. In the USA, it is the issue of curriculum transactions, whereas in the erstwhile socialist countries the issue is of relevant curriculum for the market economy. In other developing countries the issues relate to relevance and excellence as well as efficiency of the system.

REVIEW OF RESEARCHES IN INDIA, 1988-92

In India, researches are carried out by M.Phil and Ph.D. scholars as well as by the faculty members in the universities, colleges and other institutions of higher education. The review of M.Phil. and Ph.D. research studies submitted

to various universities in the country in the area of higher education during the period, 1988-92 revealed that as many as 48 M.Phil. and Ph.D. research studies have been completed by the scholars. Likewise, another 12 research projects have been completed by the faculty members in the institutions of higher education during the same period.¹ These studies could be classified into four major categories:

1. *Growth and Equity of Higher Education:* Studies dealing with historical and contemporary developments of education in the State, region, district and institutions, and the disparities in development, are classified under this category.

2. *Quality and Relevance Studies:* Studies dealing with the issues of: contents of curriculum, processes of curriculum transaction, students' and teachers' response to the processes and outcome are put under this category.

3. *Efficiency Studies:* Studies dealing with policy, planning, organisation, management, finance and other issues of efficiency of the system are classified in this category.

4. *Innovations:* Studies dealing with innovations in higher education are put in this category to highlight importance of this area.

There is every possibility that a study may fall under more than one category or may require a new category. Nevertheless, these classifications are adopted for the purpose of convenience of analysis.

The distribution of the M.Phil./Ph.D. research studies and the research projects under the above categories is given in Table 1.

1. It may be mentioned that there is no comprehensive listing of M.Phil and Ph.D. studies, and projects completed by various scholars and faculty members in the universities. The studies reported above have been culled out from the sources, namely: studies specially sent to the NCERT; studies reported by the Association of Indian Universities in their publication *Doctoral Dissertations in Social Sciences*; and research studies listed in the Index of studies prepared by the NIEPA, ICSSR and other organisations.

Table 1
Distribution of Researches Studies by
Categories 1988-92

<i>Categories</i>	<i>M.Phil./Ph.D.</i> <i>Studies</i>	<i>Research</i> <i>Projects</i>
1. Growth and Equity	19	1
2. Excellence and Relevance	18	2
3. Efficiency Policy, Planning, Management and Finance	9	8
4. Innovations	2	1
	48	12

There are 19 M.Phil./Ph.D. studies and one research project dealing with regional development of higher education, regional disparities based on historical and contemporary information/data and document analysis. The number of Ph.D. studies dealing with excellence and relevance, covering the curriculum, methodology, students' and teachers' response, and opinions of students and teachers about the relevance of courses, account for 18 M.Phil./Ph.D. research studies and 2 research projects. Studies on the efficiency aspects in the area of policy-planning, organisation, management and finance account for 9 M.Phil./Ph.D. studies and 8 research projects. There are two Ph.D. studies, and one research project, which deal with the aspect of innovations. It is very likely that this aspect is dealt with by many studies analysing the innovations in their respective areas. However, these are the studies which exclusively deal with this aspect.

Growth and Equity: Historical and Contemporary Developments in Education

The following researches fall under this category: Benal, B.I. (1988), "Development of higher education in Karnataka during the Plan periods"; Dash, J.P. (1990), "Growth and

development of higher education, Orissa (1936-1985)"; Deka, B. (1989), "Growth and development of higher education in Kamrup district since Independence and its impact on society"; Dutta, P.C. (1988), "Development of higher education in Assam during the first half of the 20th century"; Ruby, D.'s (1991), "Development of higher education in Meghalaya". The thrust in these studies is to review the progress with the help of historical documents and examine the development in the contemporary period. One of the common findings that emerges from these studies is that the progress of development of higher education has been much faster after Independence and the reorganisation of the states. Higher education has progressed after the decision-making powers were vested with the people of the state/region. The studies reveal that the development of professional and technical education is still found to be lacking in some of the states.

Excellence and Relevance: Contents, Processes, Students and Teachers

The contents of knowledge, the methods and process of transaction of knowledge, socio-economic background, the attitude of those engaged in transacting the knowledge and those who are enrolled in higher education have always been the concern of researchers. In the development of human resources several factors and forces come into play. The understanding of these forces, therefore, is of significance for formulating the future policies and plans. Amudharani, R. (1990) "cooperative study of B.Sc. and M.Sc., Physics curriculum in affiliated and autonomous colleges" and Vijaylakshmi (1988) "An evaluation of logical applications of mathematics to educational research with special reference to the doctoral level" are the two studies related to curriculum and the methodology of research. These studies tend to reveal the general weakness of the curriculum in affiliated colleges and lack of understanding in the use of the tools of mathematics by the researchers. Though, there is a general feeling

that the curriculum lacks relevance in the societal context, it seems that this aspect has not attracted the attention of researchers and research guides adequately.

There are, five studies which deal with behavioural and value response of students. The studies by, Chowhan, S. (1992) "Values, self-concept, creativity among professional college students"; Dimbla, P. 1990 "A corporative study of competitiveness and cooperativeness in higher secondary, graduate, post-graduate students with regard to their territoriality, SES, academic differences"; Lidhoo, M.L. and Sapru, A.K. (1989) "Level of frustration among college students in relation to their intelligence and social class"; Kaur, M. (1990), "A study of adjustment of university research scholars in relation to their personality, intelligence, values and social economic status"; Celine, R.A. (1988) "A study of political awareness of post-graduate students and their attitude towards democracy"; and Chakravorty, N. (1991) "A study of difference in attitude of college students towards national integration in Meghalaya; factors affecting attitude" fall under the sub-category of behavioural and value response studies. These studies are directed towards examining the influence of the background factors on learning, values and the behavioural response of the students.

There are two studies on teachers; these are by Dharam V. (1992) "Politicization of teachers in higher education in Uttar Pradesh" and Ramakrishnaiah, D. (1989) "Job satisfaction of college teachers". Both examine the respective aspects keeping in view of the background of the teachers.

On the teaching-learning processes, there are three studies. These are by Shah, D.A. (1989) "An operational research techniques of networking analysis applied to the higher secondary classes in the State of Gujarat"; Sharma, S.G. (1988) "A study of factors related to feedback, respectively, of students teachers in the colleges of education"; and by Gupta, S.K. (1990) "Innovations in teaching learning process in higher education". These studies

tend to reveal the use of certain techniques on the learning response of students.

Two studies by Hans, G. (1988) and Hans, G and Vadhyar, R. (1988), dealing with NSS schemes, examine the relevance of extension activities—the third dimension of the university system.

Efficiency, Policy, Planning, Organisation, Management and Finance

For achieving efficiency and effectiveness in the functioning of an institution, organisation, management and financial analysis are very important. There are two studies which deal with the aspects of organisation and management. These are by Chettiar, G.R. (1987) "A study of the organization and conduct of a few typical institutions engaged in rural higher education in terms of their objectives"; Devi, S.R.R. (1992) "A study of the concept of a university as reflected by the Buddhist monasteries of India". There are two other studies dealing with the cost, wastage and stagnation aspects. These studies are by Behera, S.K. (1991) "A study of institutional cost of university education" and by Krishnaji, G.H. (1989) "A study of wastage and stagnation of students at college level, with special reference to Sivaji University area". The study by Chinnamma, P. (1992) "A comparative study of the performance of degree colleges under different managements in coastal A.P." deals with the impact of management on performance from the points of the aspirations of students and parents.

Besides M.Phil. and Ph.D. research studies in the area of efficiency, there are nine research projects. Of these, four studies deal with the planning and finance aspects. These are by Sharma, G.D. and Sanyal, B. (1991) "Mechanism of Resource, Allocation on Higher Education"; Somaih, H. (1992) "Financial Management of Indian Universities"; Sharma, G.D. and Gamar, F. (1990), "Efficient utilisation of Resource in Higher Education"; and Dutt, R. (1991) "Study of cost of distance education institutes with

human resources and R & D. But the question that arises is: How far is this role being played by the system? In order to find out that researches are needed in the area of the relationship between the higher education system and socio-economic development. If one wants, one may even raise a question with regard to the basic logic of the relationship and the purpose of higher education. And, if one accepts this relationship, then the questions that arise are related to the working of the system. Given this paradigm, the analysis may pertain to: the size and access of the system; relevance and quality of the system; governing structures and management practices; financial support and use of resources. The other set of questions pertain to: planning for development; the processes of working; the performance by the system; the role, attitude and training of the human resources. One might as well try to find out alternative ways to carry out the objectives of higher education. The researches discussed above and so far carried out are basically limited to certain aspects and areas.

The issue of access has received a certain attention but, within this, access to higher education by women and other backward sections and regions have not received as much attention as they deserve. Within this area, access to prestigious courses have received very little attention. Though the issue of over-expansion of higher education is often mentioned in public statements, yet a scientific and comparative analysis of the size of the system, its regional distribution and its relationship with societal needs have not attracted many scholars.

The issue of relationship of higher education with national development did receive the attention of scholars in the initial period, i.e., around the 1970s, in India and abroad. However, this area has not received much attention from scholars during the recent past. In view of the role of R&D in the national development, an analysis of this issue has become very necessary, yet studies on this aspect are very few.

Studies dealing with the fundamental questions pertaining to this relationship and alternative strategies are very difficult to find out. Studies on framework of analysis, keeping in view the social-political and economic aspects, are very negligible.

The relevance of the curriculum at the undergraduate level has been a matter of general inquiry, yet the studies on this aspect are not many. Studies analysing the relationship between knowledge and skills of persons and persons' productivity have not been attempted by the scholars.

Since the late 1980s, in India, as in many of the developing countries, the financing of higher education has become an important issue. The general emphasis has been on literacy and primary education and not on higher education. But there are a few studies analysing the impact of cut in resources for higher education, the implication of mobilisation of resources from private sources and the efficient use of existing resources. Here, mere feeling and impressions seem to work. Quite often, it is said that students' fees are very small, yet studies analysing extent of costs incurred by the students are very hard to lay hands on.

Autonomy to institutions of higher education has been a very important issue; yet the studies on autonomy and the functioning of institutions are very few. Analyses of the governing structure, funding agencies, the role of the state, and autonomy, are rare. Similarly, alter native structures of governance, planning at the state and regional levels, institutional management, the changed role of institutions in the light of liberalisation and opening of economy to the world market are issues which have not received adequate attention from the scholars. Studies on coordinating structure, and their impact on the working system is yet another area where researches have not been attempted. There have been some studies on teachers and students. Yet studies dealing with background of teachers and students, projections for future trend and the impact of the background factors

on the quality of higher education are virtually absent.

EMERGING AREAS OF RESEARCH

The Indian Context

The future development process depends on knowledge. The 'smoke-stack' industries are being replaced by the information and knowledge industries. In the process of development of mankind, knowledge and information have become crucial as never before. Technological advancement caused through R&D is transforming the production and distribution processes. The policy of protection is giving a way to the policy of liberalisation and competitiveness. The role of higher education in the technological advancement and openness of economy becomes very critical.

How far the system is equipped to perform this role is a matter of enquiry. But no system of education works in isolation. Political, economic, cultural factors of a nation state considerably influence its functioning. Coupled with this are international developments and dominance of developed countries which influence the developing countries. Analysis of the impact of these factors on higher education is one of the emerging areas of research.

The knowledge, R&D and information industries are increasingly becoming important for the economic and social development of a nation state. Keeping this in view, it may be necessary to address what the thrust areas of development are and how the Indian higher education system is responding. Coupled with this is the issue of the changed demand of the quality of human resources to cope up with the liberalisation of the economy. The policy of opening up to the world market has and will further cause competition in the domestic economy; this would, in turn, call for competitive R&D and quality of human resources. How far will the system of higher education be able to cope up with this challenge? Given the structure (which was created under the conditions of protection) how far will the system

of administration of higher education help in achieving its goal? What are the reforms and changes needed to achieve the same? In order to scientifically reflect on these broader issues, a series of studies would be needed on: (a) the curriculum, methods and strategy of curriculum transaction; (b) the performance of the students, teachers and the system as a whole; and (c) the governing structures and the structure-function relationship in the changed situation.

Another emerging area of research is resources for higher education and financial management. In this area the questions that arise are related to areas both of finance and governance. How far would the system of private universities work in the Indian context? What is the experience of those countries which have such a system? These questions have to be addressed in the economic, political and cultural contexts.

Global Context

The future research needs relate to the following four areas which are on lines with the UNESCO expert group meeting on higher education. These are highlighted here along with future thrusts of research as visualised by the author.

(1) The suggested thrust in the global context is on how to achieve parity with the industrial and post-industrial nations without sacrificing the cultural perspective. Similarly, the thrust is on how to educate people to preserve the natural world and to cope with environmental hazards by effectively providing environmental education (UNESCO, 1986, p. 13).

(2) In policy, administration and management and governance systems, the suggested thrusts are: "higher education can help nations to achieve higher quality of life; the role of higher education in national policy, particularly regarding planning for future; the analysis of the gap between the policy (government and institutional) and practice. Likewise, analysis of extra-national forces that influence the developments of higher education becomes important". (UNESCO, 1986, p. 20).

(3) In curriculum, teaching methods, educational material and technology, the emerging areas relate to the role of the universities in professional education and programmes; curriculum reforms focusing on creativity and critical examination and use of technology in higher education. (UNESCO, 1986, p. 29)

(4) In students and faculty development and evaluation, the future needs are to study: the conditions of work of faculty and students; teaching-learning process, faculty improvement; employment and career patterns of faculty; the transition process from school to higher education; and the relationship between higher education and society; the cost and financing of higher education; the alumni (UNESCO, 1986, p. 33).

Certain issues are becoming common between the developing and the developed countries. These are: (a) ever increasing demand on higher education, (b) the flexibility and dynamism of the system to cope up with the changing situations. Planning, therefore, becomes a major issue for development, role performance and evaluation of the system.

IMPLICATION FOR PLANNERS AND ADMINISTRATORS

One of the weakest links between policy, planning and practice is the lack of a proper data and research base for the purpose of policy-making and implementation. Often, the decisions are taken on general understanding, which may be closer to the reality but which always overlooks the crucial aspects which one learns through a deeper scientific analysis of the problem. There is a built-in limitation owing to the system of governance, i.e., the government bureaucracy. It does take professional institutions into the consultation fold, yet it increasingly depends on bureaucratic briefings. Such a system of governance always creates a gap between what exactly is needed and what is offered as policy reforms. Hence the problems elude the answers.

Another problem is too much influence of the so-called realities—often in a myth form—and the inability to grapple with broader issues and the future vision. This is because of the lack of training of those who deal with the issues at the governmental level. It is, therefore, imperative for planners/administrators to remove this gap. This could be done through: (a) encouraging series of research studies in the needed areas; (b) sponsoring research in the areas which are of importance for policy formulation, implementation and review; (c) developing broad-based consultation, particularly with those who carried out research and those involved in the research, before taking decisions on the issues of larger consequences. Research on specific aspects which enable the system to improve its efficiency and its working should be encouraged and the research findings be acted upon. It may also be necessary to venture in the new areas through studies on vision-building for the future. All this is necessary for a forward looking nation.

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