

CHAPTER I

INTRODUCTION

Human resources development is an important component in the progress of any nation. The role of education in human resources development need not be emphasized. The philosophy of development in recent times has identified education as a cornerstone of democratic institutions and nation-states. India as a powerful democracy with enormous human resources has given topmost priority to 'education' for its overall development. Until recently, our focus was on school education. Now higher education is an important item on our agenda. This is the time to decide not just how many but what kind of universities and institutions of higher learning we require. More than ever before, we are aware of the subtle connection between higher education and the future of our democracy.

At no time in the history of independent India has higher education received such attention as it has received now. Both the central government and states have been undertaking several initiatives to bring reforms in higher education. However, the project of introducing reforms in higher education poses several challenges. We need a sensible road map to continue our journey, a clear-cut plan to work further and the commitment to accomplish the mission with a comprehensive vision.

Karnataka, one of the pioneering states in the country to introduce reforms in higher education, is aware of the need for such a vision. Realizing the importance of an envisioning exercise for higher education *Vision 2020: Higher Education Karnataka* has been prepared. The document aims at presenting a picture of how

do we envision the status of Higher Education in Karnataka by 2020? How are we going to achieve the goals we set for ourselves?

Instead of giving a myopic account of future tasks, we have attempted to present a perspective plan for future development of higher education in Karnataka, which is the result of serious deliberations on core issues in the contemporary education system.

We need to assess our present standing in the field of higher education in order to diagnose some serious challenges that need addressing. The second chapter titled “Higher Education in Karnataka: An Overview” presents a matrix of higher education in terms of statistical account of institutions of higher learning, development of university education and college education, and in terms of their types, number and scope.

While preparing the document we needed a diagnostic assessment, which could tell us how to proceed further. The third chapter “Diagnostic Assessment: Issues, Challenges and Recommendations” identifies very vital issues we need to pay attention to and some challenges posed by the present system. An attempt has been made in the chapter to suggest certain solutions to address the problems.

The fourth chapter presents the focus areas — establishment and development of institutions of higher education; governance; financing; academic and intellectual environment; strategic initiatives; student admission and progression; niche areas for academic development; research and publications; networking and clustering of institutions; industry and education interface; community and stakeholder linkages.

An institution or any idea needs to be value-driven for its sustainability. Higher education should go beyond the framework of employability. It should be a means for building good citizens as well. Such a programme requires the integration of values and ethics in the project of envisioning. The vision document has a carefully worked out philosophy and value system for envisaging the future of higher education in Karnataka; chapter 5 deals with the values, philosophy and ethics in relation to higher education. The last chapter 'Targets' gives an account of concrete goals to be achieved within a decade and possible ways to reach them.

Vision 2020: Higher Education Karnataka envisages a forward-looking higher education system for the State of Karnataka with a hope to build it as a model state in India for excellence in higher education.

CHAPTER II

HIGHER EDUCATION IN KARNATAKA: AN OVERVIEW

Introduction

We have already made a beginning in the field of higher education. Considerable progress has been made in Karnataka with the establishment of more than twenty universities and a large number of undergraduate colleges. More importantly, its first university is on the verge of completing hundred years. Such progress needs to be taken into consideration before we proceed further. The aim of this chapter is to give an overview of the present situation of higher education in Karnataka; number of institutions of higher learning and their functions, types of these institutions and a cursory glance at the tertiary education system in Karnataka. The chapter does not undertake the analysis of our success or failure. It tries to present a statistical matrix of higher education in Karnataka. This will help us to identify our strengths and weaknesses for further analysis and discussion.

Higher Education Matrix

Type of Institutions	No
State Sponsored Universities	24
Deemed to be Universities	16
Private State Universities	02
Central University	01
Undergraduate Colleges	3360 *
* The data is subject to correction.	

There are twenty-four State Universities. They may be categorised as Affiliating General Universities, Affiliating Professional Universities, Non-Affiliating Professional Universities, University for Distance Education and Specialised Universities. Among them, at least two universities have a very long history – the University of Mysore, Mysore and Karnatak University, Dharwad. Four universities have been established recently with the special mandate of catering to local needs. They are Tumkur University, Tumkur; Davangere University, Davangere; Rani Channamma University, Belgaum; Vijayanagara Sri Krishnadevaraya University, Bellary.

The Karnataka State Women’s University, Bijapur, a full-fledged multi-faculty affiliating university, caters exclusively to women’s education.

AFFILIATING GENERAL UNIVERSITIES

Affiliating Universities (Established before 1987)

SL NO	University	Year of Establishment	No. of PG Centres	Number of Affiliated Colleges*	Website
01	University of Mysore, Mysore	1916	3	207	http://www.uni-mysore.ac.in
02	Karnatak University, Dharwad	1949	2	254	http://www.kud.ac.in
03	Bangalore University, Bangalore	1964	1	661	http://www.bub.ernet.in
04	Gulbarga University, Gulbarga	1980	--	277	http://www.gulbargauiversity.kar.nic.in
05	Mangalore University, Mangalore	1980	1	190	http://www.mangaloreuniversity.ac.in
06	Kuvempu University, Shimoga	1987	1	82	http://www.kuvempu.ac.in
* The data is subject to correction				Total : 1671	--

Newly Established Affiliating Universities (After 2003)

SL NO	University	Year of Establishment	No. of PG Centres	Number of Affiliated Colleges *	Website
01	Karnataka State Women's University, Bijapur	2003	--	80	http://www.kswubij.ac.in
02	Tumkur University, Tumkur	2004	--	86	http://www.tumkuruniversity.in
03	Davangere University, Davangere	2008	1	110	http://www.davangereuniversity.org
04	Rani Channamma University, Belgaum	2010	2	335	http://www.rcub.ac.in
05	Vijayanagara Sri Krishnadevaraya University, Bellary	2010	1	84	http://www.vskub.org
* The data is subject to correction				Total : 695	--

Affiliating Professional Universities

SL NO	University	Year of Establishment	Number of Affiliated Colleges *	Website
01	Rajiv Gandhi University of Health Sciences, Bangalore	1994	688	http://www.rguhs.ac.in
02	Visvesvaraya Technological University, Belgaum	1998	186	http://www.vtu.ac.in
03	Karnataka State Law University, Hubli	2009	87	http://www.kslu.ac.in
* The data is subject to correction			Total : 961	--

Non-Affiliating Professional Universities

SL NO	University	Year of Establishment	No. of Constituent Colleges	Website
01	University of Agricultural Sciences, Bangalore	1964	07	http://www.uasbangalore.edu.in
02	University of Agricultural Sciences, Dharwad	1986	05	http://www.uasd.edu
03	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	2004	07	http://www.kvafsu.kar.nic.in
04	University of Horticultural Sciences, Bagalkot	2008	10	http://uhsbagalkot.edu.in
05	University of Agricultural Sciences, Raichur	1999	04	http://www.uasraichur.edu.in
			Total : 33	--

University for Distance Education

SL NO	University	Year of Establishment	No. of PG Centres	Website
01	Karnataka State Open University, Mysore	1996	--	http://ksoumysore.edu.in

Specialized Universities

Sl. No	University	Year of Establishment	Website
01	Kannada University, Hampi	1991	http://www.kannaduniversity.org
02	Karnataka State Dr. Gangubai Hangal Music and Performing Arts University, Mysore	2010	http://musicuniversitymysore.com
03	Karnataka Sanskrit University, Bangalore	2010	http://www.ksu.ac.in
04	Karnataka Janapada Vishvavidyala, Shigoan, Haveri	2011	http://www.janapadauni.in

Apart from general affiliating universities, Karnataka State has established some affiliating universities in the area of Health Sciences, Engineering and Technology, and Law Education. There are some non-affiliating professional universities in the areas of Agriculture and Horticulture, Veterinary, Animal Husbandry and Fisheries Sciences. Four universities in Karnataka are established in the interest of the preservation and promotion of local cultures, arts and languages: Kannada University, Hampi; Karnataka Sanskrit University, Bangalore; Dr Gangubai Hangal Music and Performing Arts University, Mysore, and Janapada University, Shigoan.

Institutions in Karnataka Sponsored by the Central Government

Another very important segment of higher education in Karnataka is the institutions sponsored by the Central Government.

- Indian Institute of Science, Bengaluru
- Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru
- Raman Research Institute, Bengaluru
- Indian Institute of Management, Bengaluru
- Central Food Technological Research Institute (CFTRI), Mysore
- National Institute for Mental Health and Neuro Sciences (NIMHANS), Bengaluru
- Institute of Socio Economic Change, an ICSSR-supported research centre, Bengaluru
- National Law School of India University, Bengaluru
- Indian Institute of Horticulture Research, Hesaraghatta, Bengaluru
- Central Institute of Animal Nutrition, Bengaluru
- National Bureau of Agriculturally Important Insects, Yalahanka, Bengaluru
- National Bureau of Soil Science and Land Use Planning, Hebbal, Bengaluru

Collegiate Education

The Department of Collegiate Education, established in 1960, manages the administration of 2477 non-professional colleges affiliated to conventional State Universities in their respective territorial and administrative jurisdiction across the state. The department has been striving hard to reach out to remote places by imparting quality tertiary level education to the rural mass. Perhaps no other state in India has so many government colleges situated in rural setting as Karnataka has.

The Department of Collegiate Education is proactive and has taken many initiatives to transform the tertiary education in the state. For more details in this connection, visit <http://www.dce.kar.nic.in>

There are 972 professional affiliated colleges coming under the jurisdiction of Rajiv Gandhi University of Health Sciences, Visvesvaraya Technological University and Karnataka State Law University.

The Agriculture, Horticulture and Veterinary Universities have their own Constituent Colleges and off Campus Centres.

The diversity in higher education institutions is an indication of many levels of challenges that we face while dealing with the system of higher education. No one segment of this entire system resembles the other in its functioning. Consequently, the challenges in relation to governance and reform of these institutions are equally multifaceted.

CHAPTER III

DIAGNOSIS: ISSUES, CHALLENGES AND RECOMENDATIONS

Introduction

In the previous chapter, we had a statistical overview of higher education in Karnataka. This should lead us to the most important task of identifying issues we need to pay attention to and challenges we need to face for the development of higher education. A cursory glance at the higher education system in Karnataka poses some serious challenges which need to be addressed properly to ensure quality education. The most important of them are as follows:

1. Localisation of the state university system

Increasingly the State Universities are becoming sites of academic inbreeding. Most teachers and students of State Universities come from the same or contiguous regions as the location of the University. Only rarely does a State University reflect a truly state-wide, let alone a national, outlook in the choice of faculty and students. This trend localises the Universities in a very debilitating way. One argument has been that the mandate of State Universities is to redress regional imbalances and provide opportunity for the youth of the region. However, instead of reading this as an opportunity for the University to contribute to redressing regional imbalances through its intellectual and social innovations, most often it is misread to solely mean that the University is set up to provide job opportunities to the people of that specific region.

Recommendation:

Therefore, there is an urgent need for universities to develop a broad-based recruitment policy. Towards that end, Universities could develop a diversity index, which rates their performance on a diversity scale that gives a sense of the different backgrounds (educational, social and regional) from which it has drawn its faculty members and administrative personnel. Additionally, it may be important for Universities to provide extremely flexible and customised work options to its scholars such that academics can continue to work across multiple institutional and professional contexts. This will help attract different kinds of professionals from varied institutional background to the university.

2.Lack of clear policy frameworks for entry of new education providers to the higher education system:

The next decade will witness a huge influx of private and foreign players into the higher education system in our country. Even now, private investment in higher education, especially in the professional courses, is exponentially higher than public investment. In Karnataka, private investment in both medical and engineering institutions is a little above 80% and public investment only accounts for the remaining 15 to 20%. Apart from the regulatory and governance issues regarding private institutions, it will be crucial to examine the terms on which new players, both private and foreign, will enter the system as also the scope of services they would be willing to offer, facilities they need to create, policy of enrolment, etc . Given that the private investment is only increasing even in the general education segment (currently there are about 94 private universities in India. Karnataka has a modest number of two private universities, but states like

Gujarat, Haryana and Uttar Pradesh have close to 10 each. It is only expected that this number will increase.

Recommendation:

It is important to develop a robust forecasting mechanism for the growth of this segment, in order to streamline educational planning in Karnataka. Statutory bodies in higher education could host a series of consultations with many prospective players in the field of education to assess challenges and opportunities in the entry of private players in higher education. It may also be necessary for the government to set up an expert committee to recommend, review and mentor the process of the entry of private players into the system. It is of utmost importance to ensure that the stakeholder representation on such expert committees be diversified to take into account all facets of this issue. Although one may expect that market forces and the demand ratio will take care of the quality of such players, it is reasonable to build in assessment mechanisms, which are more dynamic and proactive than the 'invisible hand of the market'. Towards that end, it is important to ensure that self-accreditation and external accreditation be made mandatory. However, rather than looking at this issue solely from the governance perspective, it is also important to look at it from the perspective of institutions themselves. Therefore, the need of the hour is that a body similar to the Association of Indian Universities be set up at the state level, which includes both state and private universities, and reputed research centres to explore and implement mechanisms of self-governance and mutual capacity building.

3. Lack of mission differentiation between several types of institutions

Although the higher education scene is variegated in terms of institutional typology and responds to the diverse demands of many sections of the society, it is puzzling to note that this variety is not reflected in the differentiation in the mission of most institutions. All higher educational institutions irrespective of the differences in their location, demography, specialisation, core competences, financial strength, local resources and opportunities resort to highly stereotypical and straitjacketed modes of functioning. Thus, we have a situation where all institutions are supposed to train students for the job market as well as entrepreneurship (as this could be a terminal degree for most students). They are also supposed to train future researchers and prepare them for postgraduate education. We need to provide our students with citizenship training and various soft skills for functioning in the modern world; develop a strong research profile as also develop a portfolio of community-oriented services, link up with industries and corporate houses and provide employment opportunities for graduates who would want to enter the teaching profession. A crucial question to ask is, if the needs of the persons and groups entering educational institutions are so different, then why is the institutional matrix of higher education not responsive to these differential demands?

Recommendation:

A crucial step in this direction would be to actively foster institutions to undertake periodic visioning exercises, which will clarify the need for differentiated vision and create clusters of institutions with role differentiations in a given region. Developing a matrix of roles for institutions to occupy (like research and teaching

university, teaching college recognised for research in select areas and full-spectrum teaching college would be one such matrix)and providing differential financial and administrative support for universities based on their mission would greatly aid the process of mission differentiation.

4. Trust deficit of public in higher educational institutions

Despite the widespread rhetoric about the importance and value of education and the respect commanded by an “educated person” in our social life, there seems to be very little translation of this sentiment into active public trust in our institutions of higher education. The decreasing role of private philanthropy in higher education and the increasing mistrust in the value of a university degree, (demonstrated by many studies, which capture corporate-house attitudes regarding the unemployability of fresh graduates) is a cause of serious concern.

Recommendation:

Apart from general measures for quality enhancement of higher education, it is important to build greater linkages between institutions and the society it serves. Equally important is to develop competency-based parameters for assessing educational achievement at every terminal degree of higher education. We need to concentrate on social skills development and overall personality development of graduates along with their acquisition of knowledge. This will not only help the youth in facing society but also in the long-term, it will help us to connect higher education with social ethos.

5. Lack of dynamic learning goals and curricular relevance

Ask any student why he is in higher education and he will give you answers that are far from inspiring. Ask any graduate what was the use of his college education, he will most often than not go on a diatribe against his educational degree and its utter irrelevance to the demands of his professional or social life. A better way of articulating this problem is to say that students are unable to make sense of their education because they are unable to make use of their education. They are unable to make use of their education because their education is not inducing in them critical skills or meta-learning which includes the competence to learn to learn. Most content-based education, added with the compartmentalisation fostered by discipline-bound approaches is failing in the task of producing people who are capable of thinking creatively: a demand made on young people both by employers and advanced researchers. When what is being demanded of higher education institutions is to produce a particular kind of competency in its graduates, most higher education institutions are responding by cobbling up what they perceive to be new specialisations and areas of study, leading to further compartmentalisation and greater deficit in general and broad-ranging cognitive and decision-making abilities. Therefore, we have a situation where we have graduates in tourism, event management, communicative English and film studies while the need of the hour is cognitive and decision making competencies of greater latitude and felicity. Therefore, here is a double bind in the true sense of the term: educational institutions do not engage in active and cutting-edge knowledge production for all their touting of the disciplinary and subject-wise specialisations; nor do they provide wide-ranging cognitive

competencies, which can be put to use in multiple contexts of professional and academic life.

Recommendation:

Therefore, it is imperative that instead of focussing merely on developing market-friendly courses, which in the final instance succumb to the very fluctuations in the demand from the market or at any rate narrow down the skill sets of a graduate student to one vocational stream, it is important to render courseware relevant by instilling in students broad-based competencies and critical thinking abilities.

6. Research Orientation in Higher Education

The crucial difference between higher education in the sense of University education and all other forms of post-secondary-school education like professional and vocational courses is that, whereas the latter are meant to be skill oriented, University education is oriented towards production of new knowledge. Although, this distinction may not hold in practice, and cutting-edge research may be coming out of professional medical and engineering institutions in the country, the division holds insofar as the evaluation of the University is concerned. University education system has to be necessarily evaluated for its research contribution and this is where most Indian universities fail to pass the test. Of all the research produced in India, by one estimate, only about 12% is produced in the Universities and the remaining 88% is produced in research centres and private firms with no links to the university. Lack of research culture at our Universities is the result of a number of problems that troubles the

University system and therefore no magical solution may be on the offer. However, certain concrete steps to encourage research culture in the universities beyond the present scheme of financial incentives needs to be explored. It is important to integrate research into the bloodstream of the University and not make it an add-on.

Recommendation:

A definite step in inculcating research capability at universities is through reforming the curricular structure at the undergraduate level. If the undergraduate curriculum could be benchmarked with the best in the world in respective disciplines and be made more rigorous, then naturally the pressure on the postgraduate segment to offer more than the undergraduate level will increase. This could result in research-curriculum integration. Another possibility is to provide special incentives for research, especially of the collaborative variety where multiple institutions can come together and depute, employ members from such institutions to participate in large-scale research programmes. Research mentoring for teachers is something completely absent from the Indian educational scene. It is somehow assumed that a person qualified to teach is also by the same fiat qualified for advanced research. Nothing can be farther from the truth than this assumption. As a result, younger teachers entering the system are left un-mentored and unguided resulting in serious spiralling-down of research quality over the years. Therefore, it is crucial that teacher research be encouraged at a greater intensity than has been done in the past.

7. Challenges of the affiliation system

State universities are the regulatory authorities for a large number of colleges (including government, private and aided colleges). This regulation spans across areas like approval of courses prescription of curriculum, conduct and evaluation of examinations and related activities. In practice though, the actual role of the University in the academic functioning and quality assurance of the affiliated colleges is minimal. However, in the current system universities depend on affiliated colleges for a sizeable chunk of their revenue. This has created a peculiar systemic crisis: affiliated colleges are under-regulated and the university contribution to the academic excellence of the affiliated colleges is minimal; universities are burdened with a humungous system of affiliation, which consumes the maximum bandwidth of university administrative structures. However, owing to the fact that the affiliation system provides for major revenue source of the University no university is willing to do away with the affiliation system. This has created a huge governance deficit in the undergraduate segment.

Recommendation:

Considering the setting up of a state-level, undergraduate studies board to regulate the curricular and academic quality of undergraduate education and/or rethinking the affiliation system and its relationship to the University is of crucial importance in this regard. Nevertheless, it is not easy to get rid of the affiliating system or to replace it by another more efficient system of Collegiate Education. Until any alternative solution to Affiliating System is evolved, we have to be

content with the existing system in the interest of facilitating education to a large number of students.

8. Bridging the gap between school education and higher education

A crucial issue in Indian higher education is the quality and competence of school graduates who enter into the University system. Although in the recent years immense developments have taken place in school education reform, it has not always resulted in the increase in the gross enrolment ratio for higher education nor has it reduced the entry-level barriers to higher education. Contrary to this problem is that of benchmarking and gradation.

Recommendation:

Reform of school education to resolve entry-level barriers is one issue but simultaneously bringing undergraduate curricula to be graded cumulatively compared to the best school education in the country is the other. In order to bring quality reforms in higher education, the problems of school and pre-university education need to be addressed and reforms to be introduced there. Reforms in school education shall be complementary to reforms in higher education, and these systems shall not be tackled in isolation

9. Last-mile problems in ICT for Higher Education

When most universities worldwide have successfully adopted ICT in higher education, Indian universities and colleges suffer from a plethora of last-mile problems in implementing ICT-based solutions. Most success stories in India in the implementation of ICT are localised to institutional cases and have not proved

to be scalable across the entire spectrum of higher education. It is important to stress the need for internet and computers as a basic need comparable with basic needs like education and livelihood. More importantly, it is crucial to exploit the possibilities of institutional networking and web-based learning, with the specific aim of reaching out to larger number of people outside the formal university system and through distance education modes. Another crucial aspect is the automation of administrative aspects of higher education, relating to admission rosters, service registry of teachers, official communications, examination results and student support services. It may not be wrong to say that higher education is one of the areas where automation and ICT-based streamlining of processes is the least developed compared to other fields like banking, aviation and retailing.

Recommendation:

Setting up a special task force for enhancing ICT use in education would be crucial in this regard. State-level equivalents of INFLIBNET, which can be mandated to provide full-spectrum ICT support to higher education institutions in the state is an option, which is worth considering seriously. Automation of administrative aspects, admission process, examination related work, finance and accounting should go hand in hand with ICT use in higher education.

10. Financing patterns and self-financing of higher education institutions

The general pattern in public higher education in India is that only about 12 to 13% of the revenue is generated by tuition fees, and close to 80% of the revenue comes solely through government subsidies and grants. This is in comparison with

a country like the USA, where tuition fees recovery accounts for close to 40% of the revenue and sales and services offered by higher education institutions contribute more than 20% and private donations come up to 15%. The diversification of revenue sources is a crucial challenge, which the Indian university system has never been able to handle with any degree of success. Rather than enter into polemics about whether higher education is a public or a private good and who needs to pay for higher education, it is more fruitful to explore how to reconfigure the manner in which higher education is financed in India such maximal sources of funding can be exploited.

Recommendation:

In the context of present socioeconomic condition and with an aim of providing access to higher education, it is difficult to generate resources from fee collection in public funded institutions. However, it is possible to augment resources from charity and philanthropic services. Alumni participation can be another avenue higher education needs to focus on for this.

11. Governance Deficit

It has been rightly said that Indian higher education institutions are over-regulated and under-governed. Effectively this means that where the red tape and bureaucracy is heavy in higher education, there is proportional lack of methods by which institutions can be made accountable to their stakeholders to the knowledge society in general. One of the most important issues here is the governing of self-financing and private institutions. Cadre and recruitment, quality of services, student welfare and infrastructure are all issues, which require special

attention under the issue of governance, not to mention transparency of process and answerability of governing boards of institutions to the larger public.

Recommendation:

A Students' Charter, similar to that of the Citizen's Charter could be introduced to ensure that institutions deliver on their promises and maintain standard procedures and measures for providing quality education. Alongside this, it is important to think of peer-review and peer-feedback system between different educational institutions within an education ecosystem such that greater checks and balances are built into the system.

12. Academic Audit:

Although academic auditing of higher education institutes is on card, it has not been regularly done. Wherever it is done, deficiencies mentioned in the report are hardly addressed.

Recommendation

Regular peer review and academic audit should be made mandatory. It is to be ensured that reports of the previous year should be referred to know the strengths and weaknesses of institutions. Action taken on deficiencies pointed out in the previous report should be reviewed during the next audit.

13. Distance Education

If at all higher education has to achieve the expected level of expansion in terms of gross enrolment ratio, it has to strengthen Distance Education. The existing

system needs to be upgraded so that the philosophy of distance education is realized convincingly; its role to cater to the needs of special stakeholders who could not afford the mainstream regular education.

Recommendation:

There shall be a state policy regarding Distance Education. It should frame regulations governing institutions offering courses through distance mode to check on the quality of education. A policy document regarding programmes such as Outreach Programme needs to be prepared. It should create space for those who could not pursue regular university courses. To achieve this end virtual classroom and other multimedia pedagogy could be utilized for the effective implementation of programmes.

14. Alternative Education for College Dropouts

At present higher education is a dream for those who temporarily leave colleges because of financial or other social problems. By the time, they overcome their difficulties it will be too late to pursue education. There are no other alternative avenues in our system to cater to the special needs of dropouts.

Recommendation

Non-formal higher education should be a lifelong continuous process where aspirants should be able to fulfil their desire anytime. The concept of Community College needs to be revived in order to bring back dropouts to the main stream of higher education. In this scheme, the student who is enrolled in a college will have the opportunity of multiple entries and exits. The student can leave the

college after earning some credits and leave the college with a 'Certificate' or a 'Diploma' or a 'Higher Diploma' or a 'Degree' depending upon the number of credits he earns each time. Thus, the concept of Community College helps us to increase the gross enrolment ratio also.

17. Sports and Extra-curricular Activities

Physical Education and Sports in general and extra-curricular activities in particular are marginalized segments in the overall educational programme. Intellectual development of students is closely connected with their physical development. However, at some universities, Physical Education Departments exist and Physical Directors are recruited for undergraduate education, sports and physical education remains the most neglected field in higher education. In addition, extra-curricular activities are not seen as integral part of our educational programmes. Such activities are considered almost anti-academic.

Recommendation:

Overall personality development of students is as important as their academic development. Sports education needs to be seen as part of the general education. Infrastructural facilities for sports and extra-curricular activities to be provided, and if possible, they should be part of the mainstream curriculum. Affiliating authorities should not compromise with the poor quality of sports facilities in the institutions of higher learning.

CHAPTER IV

VISION 2020: FOCUS AREAS

Introduction

Taking certain clues from the previous chapter which identified some critical issues to be addressed, the present chapter gives an outline of focus areas. The vision document has identified some key areas for focus such as The establishment and development of institutions of higher education; Governance; Financing; Research and publication; Pedagogy and curricular reform; Networking and clustering of institutions; ICT in higher education; Industry and education interface; Community and stakeholder linkages.

Establishment and Development of Institutions of Higher Education

- Encourage and support the establishment of universities and institutes of higher education especially in rural and backward areas.
- Create and provide sufficient infrastructure and identify human resources before establishing new universities and institutions. A perspective plan and a roadmap in tune with the needs of the institution to be prepared in consultation with an advisory council consisting of eminent educationists, and recommendations to be implemented phase-wise.
- Focus and develop some specializations in particular universities so that those universities should be known by certain specializations in terms of curriculum development programmes and research output in that area.

- Establish a few Centres of excellence in frontier areas of emerging disciplines in each university, which should be kept open for students, faculty and scholars from other institutions.
- Shifting the focus from mono-faculty and mono-discipline universities to multi-faculty and multi-disciplinary Universities
- Develop and revamp the technical education in the context of advancements in the world of technology and felt needs of the industry
- Establish medical, paramedical and nursing colleges to provide for optimum ratio of personnel to population in health care system
- Establish colleges of Agriculture, Veterinary and Allied Sciences in different parts of the state.
- Set up an Academy of Higher Education under the Karnataka State Higher Education Council to facilitate curriculum development, research and training in pedagogy to university and college teachers. The Academy shall be on par with Administrative Training Colleges established by the Centre as well as states.

Governance

- Fine-tune the recruitment policy in such a way as to recruit highly qualified and committed teachers for higher education.
- Fill up vacancies as and when they arise without giving scope for temporary stopgap arrangements. This is essential in the Choice Based Credit (CBC) System of education where academic progress

should go on as per the schedule with continuous assessment of students.

- Maintain optimum teacher-student ratio to make the CBC system effective.
- Encourage strong interlinks between different universities in terms of academic collaborations, credit transfer, faculty and student mobility
- Enhance the autonomy of universities to take decisions regarding academic issues such as setting up new departments, choosing areas of study, examination and evaluation schemes, coursework and curricula
- Create a collegium of academics, scholars, entrepreneurs and social activists to advise the universities on academic research and administrative issues
- Reform bodies of universities like the Academic Council and the Syndicate so that they become representative of intellectual interests and other stakeholders like parents and alumni.
- Pay special attention to establishing Research Centres across the basic sciences, the humanities and the social sciences
- Emphasize the development of the non-university segment of higher education by enhancing the scope of vocational education and making it respond to the needs of the labour market, employment aspirations of youth and the need for social innovation

- Develop special focus on undergraduate education and add value and skills in the curriculum to help those students for whom this will be a terminal degree
- Set up special research units for systemic reforms in higher education in select universities
- Ensure optimum utilization and sharing of work force and material resources in higher education institutions.
- Create a system of automation for administration, affiliation, admission, examination and evaluation, finance and accounting.
- Encourage private universities and colleges to take on the responsibility of community development through focusing attention on marginalized sections of the society
- Setting up an exclusive legal body like Higher Education Administrative Tribunal (HEAT) to address the problems of employees, institutions and other stakeholders.

Financing

- Evolve proper criteria to fund universities. For instance, universities can be classified into 'Established Universities', 'Developing Universities' and 'Newly Established Universities' for the allocation of funds. Funding shall be on the basis of priority and need
- Give performance-based financial incentives to Universities and other educational institutions based on well-established performance indicators rather than focus on the performance of individuals. Focus on the performance of institutions will yield greater benefits

- Encourage universities to generate their resources from non-governmental agencies and philanthropic enterprises.
- Providing opportunities for universities to raise funds through non-formal modes of education and service delivery
- Streamline private philanthropy into higher education by defining focus areas for development of higher education
- Enhance trust-building exercises with regard to higher education institutions so that greater private and public philanthropy is forthcoming
- Organize and strengthen Alumni Associations and make them part of institution-building initiatives.
- Increase financial independence of universities by developing a highly differentiated system of rate of recovery through tuition fees which does not burden the poorer sections of society
- Exploring the possibility of establishing the equivalent of not-for-profit companies in higher education to evolve newer models of financial autonomy and innovative fund-raising techniques through greater integration with community-oriented services and social entrepreneurship

Academic and Intellectual Environment

- Evolve broad-based criteria to select quality-teaching faculty to provide for greater representation of faculty from outside the state. At times scholars and eminent teachers from across the country may be handpicked for academic development.

- In order to achieve this, existing Academic Staff Training Colleges may be converted into Advanced Interdisciplinary Research and Training Centres in higher education with the mandate of encouraging research culture at universities
- Keep teacher-student ratio at optimum level to maintain quality in learning.
- Enable existing Refresher Courses and Orientation Programmes to be periodical training programmes in research and teaching. Shift focus from one-off refresher courses and teacher training camps to continuous research training and research mentoring for young faculty
- Move towards greater integration of research, curriculum and pedagogy by getting teachers to be part of the curriculum building exercise; provide academic incentives for curricularization of current and past research of teachers
- Curriculum shall be in tune with the needs of industry and society. Proper needs analysis to be carried out before implementing curriculum and the same shall be revised and updated periodically.
- Developing entrepreneur competency to be part of the curricula particularly of every professional, semi-professional, and commerce and management programmes. This will help students having financial and other means to take up entrepreneurship as their career. This will also indirectly help create employment opportunities for others.

- Create Entrepreneurship Promotion Cells in order to inculcate entrepreneurship skills among students so that they can be self-sustainable through self-employment.
- Offer academic programmes that promote awareness of environmental issues and natural resources, particularly conservation of natural resources like water, energy, biodiversity and soil
- Enforce global benchmarks for quality of curricula in all universities across the State and provide necessary support systems for filling the lacunae in delivering high quality education
- Intensify the facility of ICT infrastructure and give access to it to teachers and students as basic educational facility. Make broadband connectivity, internet access, computer access absolutely universal such that it is perceived as a basic necessity and every student and faculty member at a University has unencumbered access to resources and data worldwide, thus encouraging a new culture of data-intensive research
- Create new models of Industry and Education Interface by exploring innovative internship programmes for teachers and students and collaborative and joint research projects by R&D departments of industries and faculty members at the universities
- Reinvigorate the idea of the 'University Town', where the University is an active player in the public life of the city it is located in by developing strong linkages with the local community and other stakeholders
- Include skills development component in non-professional undergraduate programmes

Student Progression

- Evolve a selection procedure to select students for professional higher education based on their competencies and aptitude
- Motivate students to take up academic programmes in Basic Sciences and the Humanities through counselling, financial assistance in the form of scholarship, project funding, and initiatives like arranging visits to institutions of higher learning in these fields
- Facilitate effective counselling for students at +2 level to enable them to choose the programme based on their merit, aptitude and choice
- Organize programmes aiming at personality development and enhancement of communication skills
- Enable students to choose subjects of their choice at the undergraduate level to strengthen their knowledge base.
- Setting up a centralized and streamlined state-level student fellowship and student loan facility which depends on private and public philanthropy and governmental funds
- Establish centres at universities for training students to face competitive exams such as the UPSC and the KPSC exams and other educational tests like the NET and the SLET along with other exams such as Banking, Defence Services and others in accordance with the need of the time.

Strategic Initiatives and Niche Areas for Academic Development

- Develop integrated science education as a niche area which comprises frontier questions in emergent fields like health care, climate change, public health system, developmental economics, community resource management and governance, all of which necessarily include inputs from natural and social sciences and demands data-intensive research
- Develop special focus on Indian intellectual and cultural traditions in the social sciences and the humanities
- Increase the enrolment ratio by encouraging universities and other institutions to offer non-formal education
- Create infrastructural facilities for sports and integrate extra-curricular activities into mainstream educational programmes

Research and Publications

- A Special Purpose Vehicle (SPV) to be launched on a pilot basis in select universities and colleges for the promotion of research culture. The SPV to include provision of research facilities in terms of infrastructure, research mentoring and training in collaboration with reputed research centres, state-of-the-art libraries, laboratories, flexible teaching-research schedule and information and tie-ups with foreign universities and funding agencies and setting up of interdisciplinary research centres at the universities
- Develop basic science research in frontier areas through collaboration with institutions in the metropolitan centres and overseas

- Seed-grants to be made available for young teachers at the universities to initiate research programmes and projects
- Exploring industry collaborations to obtain funds for research activities at the universities
- Create a network of scholars working in frontier areas in research and pave the way for their regular interaction among themselves and other eminent scholars in different parts of the country by conducting topic related workshops and conferences.
- Criteria to be evolved to select appropriate candidates with research aptitude for research programmes.
- Encourage research in farm economy and management, farm technology and farm production, storage and preservation of agriculture and horticulture crops, and food technology.
- Research in thrust areas such as nanotechnology, nanomaterials, nanomedicine, bio-fuel production; conservation and sustainable management of natural resources, particularly biodiversity, water and energy, and development of eco-friendly products need to be paid special attention
- Focus on studies and research in disaster management
- Also, focus on research in the social sciences relating to demography, gender bias, women empowerment, women and children health care and nutrition and studies on language and culture.

Networking and Clustering of Institutions

- Focus on networking and clustering of institutions throughout the higher education vertical such that sharing, transfer and utilization of resources is optimized
- Develop special incentive programmes for networking of institutions such that resource duplication is avoided
- Key areas for institutional clustering could be library resources, collaborative research projects and development of specific interest areas (where each institution in a cluster can focus on developing into a Centre of Excellence in one area of expertise)
- University Library Information Network to be established as a registered cooperative to expand areas of information retrieval and share knowledge resources among state universities, deemed universities and some prominent higher education institutes in the state
- Multi-campus courses, inter-college and inter-university credit transfer system to be introduced in a phased manner
- Setting up of a Karnataka State-Universities League on the model of IVY league Universities in the USA and the London Consortium in the UK to foster greater academic exchange between faculty members and students.
- Developing a detailed but flexible set of parameters for private educational institutions to participate in the consortium system alongside state institutions

- Bringing mono-disciplinary universities relevant knowledge and cultural institutions (e.g: Sahitya Akademi, Kannada Pustaka Pradhikaara, Jaanapada Akademi) and other such institutions under the rubric of the institutional clusters so that they can contribute directly to the higher education scenario in the state without necessarily compromising on their institutional identity and autonomy
- Choice-based Credit System has been found to be not so practical for conventional degree colleges. If a cluster of colleges located in close proximity can join and introduce common programmes along with a choice of subjects will give a wider choice of subjects to choose from

Industry and Education Interface

- Create new models of Industry and Education Interface by exploring innovative internship programmes for teachers and students and collaborative and joint research projects by R&D departments of industries and faculty members at the universities
- Create platforms for periodic and regular interaction between industry pioneers and students as also the Research and Development wings of industries with the teachers and researchers in the University system
- Create posts of Adjunct Professors at universities to invite executives from corporate and industries to serve for short periods. Similarly make provision to grant sabbatical leave to faculty to visit industries and understand the needs of industries particularly the areas of investigation.
- Develop higher education as a favorable site for Corporate Social Responsibility (CSR) initiatives by focusing on end-beneficiary capacity-building and supporting disadvantaged students through additional inputs

Community and Stakeholder Linkages

- Create platforms for parents and alumni to be active in the life of the educational institutions. All institutes of higher learning including universities to strengthen their Alumni Associations to derive their support in terms of patronage and knowledge sharing.
- Explore possibilities of creating equivalents to the SDMCs (School Development and Management Committees) in higher education
- Industry representation on statutory bodies of Universities to be selected based on a broad principle of mutual benefit
- Local NGOs and other community based organisations and cultural and intellectual forums to be involved in the extension activities of universities.
- Higher education institutions to set up a cell for community services where innovative methods of connecting research and teaching to social innovation and product development for sustainable livelihoods of local communities can be actively encouraged.
- Start community colleges for continuous learning and skills development to cater to the needs of school dropouts, mid-career and early-career professionals, and students who cannot take up higher education for various reasons including financial problems. This will help youths to pursue academic programmes with multiple entries and exists. A student can opt for multiple entries into and exits from the college, and every time he does that he will earn some credit which will fetch him a 'Certificate' or a 'Diploma' or a 'Higher Diploma' or a 'Degree' depending upon the number of credits he earns each time.

CHAPTER V

VALUES AND PHILOSOPHY

Introduction

It is important to think of higher education not simply in terms of skill building and employability. Equally important is to transcend the framework of citizenship education, that is, higher education as a means for grooming good citizens. The former makes the goals of higher education too narrow and instrumental whereas the latter makes it too broad and trivial. Nor is it adequate to frame the debate in terms of whether higher education is merely a private good or a public good. Much time and energy has been spent on this issue in the last couple of decades without any resolution one way or the other. The focus of this entire debate has been solely on figuring out who should pay for higher education: the state or the individual? However, the scope of higher education extends beyond the question of who should pay for it and to whom the benefit ultimately accrues.

If reason is a species essence of human beings, and truth is the cognitive goal of the application of reason, then, it is only natural to expect that the development and perfection of reason have to be unencumbered. Therefore, it is important to reframe the approach to higher education as one of pursuits of truth in the classical Humboldtian sense. The benefits of higher education may accrue to individuals or societies as the case may be, but the pursuit of truth is neither social nor individual. As a species essence, it transcends these divisions because it is at the foundation of societies and individualities.

After having said this, we can appreciate highly context dependent methods by which we need to go about tackling the question of who should pay for higher education. Here, we will outline the values on which such a system will be built.

Values and Philosophy

- A rigorous commitment to production and dissemination of new knowledge in a variety of areas of inquiry
- Accessibility to higher education not just in terms of entry-level support systems like reservations and fee-waivers but also additionally, continuous mentoring and capacity-building exercises for the benefit of students coming from the disadvantaged sections
- Autonomy and integrity in relation to the working of the University such that it realizes the goal of the unencumbered pursuit of truth
- Liberal and humanistic outlook which emphasizes the holistic development of the individual and society, fosters critical thinking and constructive participation in social and political processes
- A renewed investment in the figure of the teacher who embodies the virtue of intellectual pursuits
- Integration and specialization of knowledge systems seen as co-constitutive rather than mutually exclusive
- Openness to new ideas and partnerships and a high degree of adaptability to changing situations allowing for newer coalitions built on the core values of higher education

Ethics and Higher Education

- The main aim of education is to serve humankind. Hence, teaching-learning process in higher education should concentrate on issues such as patriotism, national integration, understanding ones' own culture and concern for environment (based on the Indian concept of "Panchabhootha").
- The entire culture of higher education should promote freedom of thought in spiritual thinking. It should foster the ethos of freedom of worship and gratefulness.
- The social sciences shall adopt spiritual/native approach in their practice. Their syllabi shall be designed in such a way that the target group shall understand its own society and environment (Indian). There is a need for indianizing the approaches of the social sciences. They should aim at fostering a sense of oneness "Vasudeva Kutumbakam".
- A university graduate should be educated in such a way that he should lead an independent life of his own and serve society.
- Research should be encouraged in such a way that it should serve humanity continuously, not one's own career only. Research activities at universities should aim at making the country self-reliant.
- The teaching of the humanities should concentrate on developing positive thinking, Indian value system and principles of leading a noble life.

CHAPTER VI

TARGETS

Introduction

So far we discussed the existing scenario of higher education in Karnataka, issues, challenges and recommendations, certain areas to be focused, and its core values and philosophy. Now we can have a look at certain targets to be achieved by 2020. They are as follows:

Targets

- Establish new universities and other institutions of higher learning in all disciplines, and increase the number of new and innovative Academic Staff Training Colleges and Interdisciplinary Centres for advanced research in Higher Education
- Enhance infrastructural facilities and upgrade the existing ones
- Achieve 25 % of gross enrolment ratio by 2020
- Create an alternative system of academic audit along with the NAAC/NBA while increasing the percentage of universities and colleges under the NAAC/NBA accreditation.
- Peer review of the institutions to be made mandatory to know the strength, weaknesses and progression of the institutions
- Enhance research in terms of the award of doctoral, postdoctoral, D. Lit., degrees and in terms of research publication. By 2020, we set the target of increasing the figure by 60 percent more (approximately 5000).
- Research output and patents from our universities to be increased considerably

- Quality Check measures to be instituted apart from the existing ones like TQM. A transparent and quick feedback mechanism should be worked out and periodical evaluation of the progress of clusters of institutes shall be worked out. All institutes of higher education should be classified on the basis of scientifically devised criteria and should be given targets to achieve in terms of research and publication, extension activities and other related areas
- Establish a permanent Academy for Higher Education on par with Administrative Training Academies to make teachers of higher education committed to the profession
- Establish monitoring and facilitation cells for accessing UGC and other funding agencies.
- Bring out examination reforms to test the competencies and skills of students rather than their memory. Introduce the concept of Continuous Comprehensive Evaluation, after carefully examining the required modalities.
- As an immediate goal, Karnataka State Higher Education Council shall set up a High-power Committee to review the vision and workout the strategies to adopt for Vision 2020.

By way of conclusion, it must be mentioned here that *Vision 2020: Higher Education Karnataka* is an 'Open Document'; it will be modified and updated frequently without losing the essence of envisaged goals and objectives. Your suggestions and critical comments are welcome.

* * * * *