

# **HIGHER EDUCATION IN PUNJAB : VISION 2020**



**Department of Higher Education  
Government of Punjab  
Chandigarh**

---

**A Report of the Committee  
Set up by Government of Punjab  
Department of Higher Education**

---

**His Excellency the Governor of Punjab**  
Raj Bhavan,  
Chandigarh

**Subject: Submission of the Report on Higher Education in Punjab: Vision 2020.**

Hon'ble Sir,

In response to Government of Punjab Order No. 8/195/2001-4Edu.1/1101 dated January 14, 2002, the Committee consisting of undersigned persons deliberated on the terms of reference and carried out necessary spot analysis, analysis of data, interacted with eminent persons and prepared the report.

We take this opportunity to submit the report for the consideration of the Government of Punjab. We express our sincere thanks to His Excellency the Governor of Punjab for entrusting this work to us. We hope the report will help in formulating the policy and programme of action for achieving Vision 2020 for development of Higher Education in Punjab.

**sd-**  
**(G.D.SHARMA)**  
Chairperson

**sd/-**  
**(B.S.BHATIA)**  
Member

**sd/-**  
**(SATISH VERMA)**  
Member

**sd/-**  
**(PARAMJIT SINGH)**  
Member

**sd/-**  
**(NISHA SARAD)**  
Member-cum-Convenor

**11<sup>th</sup> April, 2005**

## Preface

His Excellency the Governor of Punjab vide Notification No.8/195/2001-4 Edu.1/1101 dated 14.1.2002, constituted a Committee consisting of: Prof. G. D. Sharma, Dr. B.S. Bhatia, Dr. Satish Verma, Prof. Paramjit Singh, and Smt. Nisha Sarad to explore and submit its report on the following points:

- Prepare a document of Higher Education Vision 2020;
- Explore and suggest innovative methods of financing/funding higher education in Punjab; and
- Rationalize the fee structure in colleges in Punjab so as to minimize the gap between the fees charged in Government Colleges and Private Colleges.

The Committee held a number of meetings in Universities in the State, namely, Panjab University, Punjabi University and Guru Nanak Dev University and at Consortium for Educational Communication. The Committee held discussions with eminent persons involved in higher education in different capacities to elicit their views about policy formulation, finances, management and promotion of higher education in the State. Appendix-I gives dates and venues of the meetings held by the members of the Committee. The Committee also visited a few colleges in the State to have an on the spot assessment of the status of higher education in these institutions. In addition, data were collected to study: (a) growth of higher education, (b) financing and unit cost of higher education in universities and colleges, (c) management of universities, (d) teaching-learning process, quality assurance and (e) the socio-economic background of the students in the universities and colleges of the state.

The Committee, after several deliberations and analysis of situation, based on facts and figures of Higher Education in Punjab, has prepared the report in the following chapters:

**Chapter I – Vision, Development and Future Challenges**

**Deals with Vision of growth and development of higher education in Punjab.**

**Chapter II – Teaching Learning Process**

**Deals with teaching learning process and makes suggestions for reforms to strengthen the process.**

**Chapter III – Quality Assurance**

**Attempts study of quality of system of higher education on certain parameters.**

**Chapter IV – Governance of the Universities and Colleges**

**An in-depth analysis of system of governance has been attempted in this and required structural reform for good governing has been proposed.**

**Chapter V – Financing of Higher Education**

**Analyses finances of higher education, examines the unit costs and contribution of students. It makes suggestions on mobilization of additional resources.**

**Chapter VI – Challenges and Response of Internationalization of Higher Education**

**Deals with challenges and response of internationalization of Higher Education, in particular under GATS of WTO regime.**

**Chapter VII – Recommendations**

**Based on the analysis, deliberations, views expressed by eminent persons and situations observed on the grounds, recommendations with regard to terms of reference of the Committee are made in this chapter.**

We take this opportunity to thank Vice-Chancellors of all the three Universities and Principals of Colleges affiliated to these universities, for their support in the proceedings of the Committee. Our special thanks are to: Prof. S.P. Singh, Prof. K.N. Pathak and Shri S. S. Boparai for providing support and facilities in the working of the Committee. Our thanks are due to teachers, staff and students of universities and colleges for sharing their views and for providing required data/information for the purpose of this report.

We have great deal of appreciation for staff of: (a) DPI, Department of Education, Punjab; (b) Higher Education Unit, NIEPA; and (c) CEC for their support. We are thankful to Mr. S.K. Modi, Asstt. Director, Office of DPI, Punjab, Mr. Shridhar, Mr. Guruvansh Singh, Mr. Lalit Singh and Mr. Sudhir Dagar for all their help and secretarial support. It would not be out of place to mention the names of Mr. Santosh, Mr. Vinod, S. Ramandeep Singh and S. Gurmeet Singh for their help.

We are thankful to Guru Nanak Dev University, Amritsar for taking the responsibility of bringing out multiple copies of this report.

As Chairman of the Committee, I would like to put on record my deep sense of appreciation to members of the Committee for their commitment and devotion to the cause of higher education in Punjab. I am particularly impressed by their high level of cooperation and support in the conduct of work of the committee. I would always cherish the happy memories of cohesiveness and cheerfulness of the team members.

**(G.D. Sharma)**  
**Chairperson & Director, CEC**

**Place: New Delhi**  
**Date: 25/3/2005**

**Government of Punjab  
Department of Education  
(Education-I Branch)**

**Order of the Governor of Punjab**

No. 8/195/2001-4Edu.I/1101

Dated, Chandigarh, the 14-1-2002.

The Governor of Punjab is pleased to constitute a committee of the following members in respect of achievements/objective of excellence quality in the field of Higher Education in the state of Punjab:

- |    |   |                     |
|----|---|---------------------|
| 1. | Professor G.D. Sharma<br>Senior Fellow and Head<br>Higher Education Unit<br>NIEPA<br>New Delhi-110016   | Chairperson         |
| 2. | Dr. B.S. Bhatia<br>Registrar<br>Punjabi University<br>Patiala.  | Member              |
| 3. | Dr. Satish Verma<br>Professor<br>Punjab School of Economics<br>Guru Nanak Dev University<br>Amritsar  | Member              |
| 4. | Professor Paramjit Singh<br>Registrar<br>Panjab University<br>Chandigarh.   | Member              |
| 5. | Smt. Nisha Sarad<br>Director<br>Public Instructions (Colleges), Punjab<br>Chandigarh.   | Member-cum-Convenor |
| 2. | The above committee will explore the following points and submit its report to the Govt. within a period of three months:                     |                     |
|    | a) Prepare a document on "Higher Education Vision-2020".  |                     |
|    | b) Explore & suggest innovative methods of financing/funding higher education in Punjab.  |                     |
|    | c) Rationalise the fee structure in colleges in Punjab so as to minimize the gap between fees charged in Govt. Colleges and Private Colleges. |                     |

*Contd.../-*

3. The committee will hold its meetings in the three Universities in the State and the respective University will meet the entire expenses of the meetings from their own resources.

Dated, Chandigarh  
8-1-2002

Sd/-  
(Geetika Kalha)  
Secretary to Govt. Punjab  
Department of Higher Education

No.8/1195/2001-4Edu.I/1102-05

Dated, Chandigarh, the 14-1-2002.

A copy is forwarded to the following for information and necessary action:-

1. Director, Public Instructions (C), Punjab, Chandigarh.
2. Registrar, Panjab University, Chandigarh.
3. Registrar, Punjabi University, Patiala.
4. Registrar, Guru Nanak Dev University, Amritsar.
5. All concerned members.

Sd/-  
Additional Secretary Higher Education

## Appendix-I

A Committee had been constituted by Government of Punjab, Department of Higher Education vide Memo No. 8/195/2001-4Edu.I/1101 dated 14-1-2002 to prepare and submit a report on achievements/objectives of excellence & quality in the field of Higher Education in the State of Punjab. The Committee included the following members:

- |    |   |                     |
|----|---|---------------------|
| 1. | Professor G.D. Sharma,<br>Then Senior Fellow and Head<br>Higher Education Unit, NIEPA, New Delhi.<br>Presently Director<br>Consortium for Educational Communication (CEC)<br>NSC Campus, New Delhi-110067 | Chairperson         |
| 2. | Dr. B.S. Bhatia<br>Registrar (Retd.)<br>Punjabi University<br>Patiala.  | Member              |
| 3. | Dr. Satish Verma<br>Professor<br>Punjab School of Economics<br>Guru Nanak Dev University<br>Amritsar  | Member              |
| 4. | Professor Paramjit Singh<br>Registrar<br>Panjab University<br>Chandigarh  | Member              |
| 5. | Smt. Nisha Sarad<br>Director<br>Public Instructions (Colleges), Punjab<br>Chandigarh.   | Member-cum-Convenor |

The Committee was asked to explore the following points and submit its report to the Govt. on:

- Prepare a document on "Higher Education Vision-2020".
- Explore & suggest innovative methods of financing/funding higher education in Punjab.
- Rationalize the fee structure in colleges in Punjab so as to minimize the gap between fees charged in Govt. Colleges and Private Colleges.

The Committee held its meetings in the three Universities in the State in turn, as follows:

- |     |                        |                                      |
|-----|------------------------|--------------------------------------|
| 1.  | Feb 11, 2002           | Panjab University, Chandigarh.       |
| 2.  | April 5 & 6, 2002      | Guru Nanak Dev University, Amritsar. |
| 3.  | May 9 & 10, 2002       | Punjabi University, Patiala.         |
| 4.  | June 8,9 & 10, 2002    | Panjab University, Chandigarh.       |
| 5.  | July 13, 14 & 15, 2002 | Guru Nanak Dev University, Amritsar. |
| 3.  | Dec 9, 2002            | Punjabi University, Patiala.         |
| 4.  | Feb 28, 2003           | Panjab University, Chandigarh.       |
| 5.  | Mar 23, 2003           | NIEPA, New Delhi.                    |
| 6.  | April 10 & 11, 2003    | Guru Nanak Dev University, Amritsar. |
| 7.  | July 1, 2003           | Panjab University, Chandigarh.       |
| 8.  | Sept 5, 2003           | Punjabi University, Patiala.         |
| 9.  | Oct 28, 2003           | Panjab University, Chandigarh.       |
| 10. | Nov 15 & 16, 2003      | Guru Nanak Dev University, Amritsar. |
| 11. | Nov 25, 2003           | CEC, NSC Campus, New Delhi.          |
| 12. | June 4 & 5, 2004       | Panjab University, Chandigarh.       |



13.	June 25 & 26, 2004	Consortium for Educational Communication, Nuclear Science Centre Campus, New Delhi.
14.	July 3 & 4, 2004	Consortium for Educational Communication, Nuclear Science Centre Campus, New Delhi.
15.	July 24, 25 & 26, 2004	Consortium for Educational Communication, Nuclear Science Centre Campus, New Delhi.
16.	July 31 & August 1, 2004	Panjab University, Chandigarh
17.	September 11 & 12, 2004	Consortium for Educational Communication, Nuclear Science Centre Campus, New Delhi.
18.	Dec. 24 & 25, 2004	CEC, NSC Campus, New Delhi.
19.	Jan. 22 & 23, 2005	CEC, NSC Campus, New Delhi.
20.	March 24 & 25, 2005	Panjab University, Chandigarh.

The members of the committee visited the following educational institutions in the state:-

	<u>Name of the Institutions</u>
April 6, 2002	1. S.R.Government College for Women, Amritsar.
	2. Khalsa College, Amritsar.
May 9, 2002	3. Public College, Samana (Patiala)
	4. Army Institute of Law, Patiala.
	5. Government Mohindra College, Patiala.
June 9, 2002	6. Khalsa College for Women, Sidhwan Khurd (Ludhiana)
	7. GHG Khalsa College, Guru Sar Sadhar (Ludhiana)

The members of the Committee held discussions on Punjab Higher Education Vision-2020 with Hon'ble Higher Education Ministers, Principal Secretary / Secretary (Higher Education, Punjab), Vice-Chancellors, Deans, Directors, Principals, etc., which included :-

1. Sh. Khushal Behal, Hon'ble Higher Education Minister, Punjab
2. Sh. Harnam Dass Johar, Hon'ble Higher Education Minister, Punjab
3. Sh. N. S. Rattan, IAS, Principal Secretary, Higher Education, Govt. of Punjab
4. Dr. Manmohan Singh, IAS, Principal Secretary, Higher Education, Govt. of Punjab
5. Dr. K. N. Pathak, Vice-Chancellor, Panjab University, Chandigarh
6. Dr. S.P. Singh, Vice-Chancellor, Guru Nanak Dev University, Amritsar
7. Dr. R. S. Bawa, Registrar, Guru Nanak Dev University, Amritsar
8. Prof. Param Bakhshish Singh, Registrar, Punjabi University, Patiala
9. Dr. Baldev Singh, Controller of Examination, Punjabi University, Patiala
10. Dr. K.S. Sidhu, Registrar, Punjabi University, Patiala
11. Prof. B. R. Batra, Director, Planning & Monitoring, GNDU, Amritsar
12. Dr. S K Gupta, Director, Sports, Panjab University, Chandigarh
13. Dr. Ajaib Singh, Dean, Dairying, Ani.Husb. & Agri. Faculty, PU, Chandigarh
14. Prof R C Sobtl, Dean, Foreign Students, Panjab University, Chandigarh
15. Dr.(Mrs.) Pankaj Mala Sharma, Dean, Design & Fine Arts, PU, Chandigarh
16. Prof. S M Handa, Dean, Science Faculty, Panjab University, Chandigarh
17. Prof. S K Kulkarni, Dean, Pharmaceutical Sciences Faculty, PU, Chandigarh
18. Prof. S C Jain, Dean, Engineering & Technology Faculty, PU, Chandigarh
19. Dr. (Mrs.) Satinder Dhillon, Dean, Education Faculty, PU, Chandigarh
20. Dr. Deepak Manmohan Singh, Dean, Languages Faculty, PU, Chandigarh
21. Dr. Harinder Singh, Dean, Student Welfare, PU, Chandigarh
22. Prof. Ramesh Kapoor, Dean, College Development Council, PU, Chandigarh
23. Sh. M. L. Aeri, Principal, D. A. V. College, Amritsar.
24. Sh. Subhash Chander, D. A. V. College, Jalandhar
25. Smt. Rita Bawa, Principal, KMV, Jalandhar
26. Sh. R. P. Bhardwaj, Principal, Doaba College, Jalandhar
27. Prof. A. S. Sidhu, Principal, Government College, Gurdaspur
28. Smt. Veena Khanna, Principal, Government College for Women, Amritsar
29. Sh. Shamsheer Singh, Principal, Government College, Ajnala (Amritsar)

30. Dr. Tarsem Dhaliwal, Principal, Government College, Ropar
31. Dr. Indu Sarwal, Principal, Government College, Malerkotla
32. Dr. Amar Shobha, Principal, Government College for Women, Mandi Gobindgarh
33. Smt. C. M. Garg, Principal, Government Brajindra College, Faridkot
34. Smt. Gurmeet Bhathal, Principal, Government College, Sangrur
35. Dr. J.P. Garg, Principal, Government College, Mohali
36. Dr. H.S. Attri, Principal, D D College. Barnala
37. Dr. G S Walia, Principal, Mata Gujri College, Fatehgarh Sahib
38. Sh. C S Virk, Principal, Government College, Naya Nangal
39. Sh. Jasbir Singh, Principal, Government College of Physical Education, Patiala
40. Sh. J R Ahuja, Principal, Government College, Nial Patran
41. Dr. Harjeet Singh, Principal, Khalsa College, Patiala
42. Sh. K K Saxena, Principal, Government Bikram College of Commerce, Patiala
43. Dr. R K Sharma, Principal, Government Mohindra College, Patiala
44. Sh. S S Sodhi, Principal, Public College, Samana
45. Dr. Prem Singla, Principal, Mai Bhago College for Women, Ramgarh (Ludhiana)
46. Smt. R Uppal, Principal, Janta Girls College, Raikot
47. Smt. R Saini, Principal, K C W, Civil Lines Ludhiana
48. Dr. Ravinderjeet Kaur, Principal, B C M College of Education, Ludhiana
49. Smt. Charanjit Mahal, Principal, G N G College, Model Town, Ludhiana
50. Smt. Kusum Ahuja, Director, Government Science College, Jagraon
51. Smt. Madanjit Kaur, Principal, M T S M College for Women, Ludhiana
52. Smt. Kamlesh Garg, Government College, Ludhiana
53. Smt. Jaspal Kaur Brar, Principal, Khalsa College for Women, Sidhwan Khurd
54. Dr. Rajwant Kaur, Principal, G H G H College of Education, Sidhwan Kuurd
55. Smt. Usha Maini, Principal, D D Jain Memorial College for Women, Ludhiana
56. Dr. Rekha Bhardwaj, Principal, A S College for Women, Khanna
57. Smt. S Verma, Principal, S D P College for Women, Ludhiana
58. Dr. Chander Mohini, Principal, D D Jain College of Education for Women, Ludhiana
59. Dr. J S Cheema, G H G Khalsa College, Guru Sar Sudhar
60. Sh. Jiwan Ahuja, Arya College, Ludhiana
61. Sh. Gurdip Singh, Principal, GGS Khalsa College, Ludhiana
62. Sh. A S Grewal, Principal, G T B National College, Dakha
63. Sh. J S Gill, Principal, G N N College, Doraha
64. Sh. B D Budhiraja, Principal, K L S D College, Ludhiana

## **List of Abbreviations**

AC	Academic Council
AE	Approved Estimates
AICTE	All India Council for Technical Education
CABE	Central Advisory Board of Education
DE	Distance Education
DST	Department of Science and Technology
EC	Executive Committee
EXP	Expenditure
GNDU	Guru Nanak Dev University
GOI	Government of India
GSDP	Gross State Domestic Product
ICAR	Indian Council for Applied Research
ICWWS	International Centre for WTO and WIPO Studies
JRF	Junior Research Fellow
MHRD	Ministry of Human Resource Development
NAAC	National Assessment and Accreditation Council
NRI	Non-Resident Indian
PG	Post Graduate
PTA	Parents Teacher Association
R & D	Research and Development
RE	Revised Estimates
SC	Scheduled Caste
SEED	Society for Education and Economic Development
SRF	Senior Research Fellow
ST	Scheduled Tribe
UG	Under Graduate
UGC	University Grants Commission
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

# Contents

*Letter of Submission*

*Preface*

*Office Order of the Government of Punjab*

*List of Abbreviations*

*List of Tables*

*List of Annexures /Appendices and Maps/Graphs*

<b>Chapter 1</b>	<b>VISION, DEVELOPMENT AND FUTURE CHALLENGES</b>	<b>01</b>
	The Vision	01
	Punjab Vision 2020	02
	Punjab State: Review of Development	03
	Educational Development	03
	Higher Education System	04
	Regional Distribution	05
	Socio Economic Background of Students	08
	Challenges	08
<b>Chapter 2</b>	<b>TEACHING LEARNING PROCESS</b>	<b>20</b>
	Curriculum Development	21
	Organizational Structure for Curriculum Development	21
	Composition of Board of Studies and Other Committees	22
	Changes in Curriculum	22
	Uniformity in Curriculum	23
	Decentralized Decision-Making	24
	Affiliated to Autonomous College	25
	Curricular Reforms and Capability Building	26
	Professionalising Traditional Courses	27
	Choice by Students	28
	The Semester and Credit Based System	28
	Improving Teaching-Learning	28
	Internationally Comparable Degrees	29
	State Testing Service	29
	Use of Technology	30
<b>Chapter 3</b>	<b>QUALITY ASSURANCE</b>	<b>36</b>
	Curricular Reforms and Diversification of Programmes of Studies	37
	Quality of Teachers and their Performance	38
	Teacher – Publication and Research Students Ratio	38
	Library Facilities and their Use	38
	Teacher – Research Project Ratio	38
	Distinction and Awards	39
	Junior Research Fellow (JRF) and Senior Research Fellow (SRF)	39
	Rate of Participation in PG and Research Level	39
	Rate of Wastage and Dropout in the System	39
	Academic Calendar	39
	UGC Assistance for Quality Improvement	39
	Unit Cost of Students	40
	Accreditation by NAAC	40

<b>Chapter 4</b>	<b>GOVERNANCE OF THE UNIVERSITIES AND COLLEGES</b>	<b>43</b>
	Management of Universities	44
	Aspects of Governance	45
	Senate	47
	Syndicate	47
	Board of Finance/Finance Committee	47
	Academic Council	47
	Board of Studies	48
<b>Chapter 5</b>	<b>FINANCING OF HIGHER EDUCATION</b>	<b>63</b>
	Allocation of Funds: Policy Aspect	63
	Policy and Practice of Allocation of Funds	64
	Allocation of Funds: Inter-State Comparison	65
	Per Student Unit Cost: Universities	66
	Students' Contribution	66
	Per student Unit Cost: Colleges	67
	Funds	67
	Tuition Fee	68
	Grants in Aid System	68
	Funds from Community Sources	70
<b>Chapter 6</b>	<b>CHALLENGES AND RESPONSE OF INTERNATIONALIZATION OF HIGHER EDUCATION</b>	<b>86</b>
	Students going abroad for studies	86
	Dimensions of Internationalization	87
	GATS: WTO Regime	88
	Provisions of GATS	88
	Challenges and response	88
	Enhancing quality of institution	89
	Branding & promotion of institutions abroad	89
	Policy changes in fee structure	89
	Infrastructure	89
	E-learning Technologies	90
	Structural Reforms	90
	Training of teachers	90
	Regulation of foreign arrangements in Punjab	90
	SEED-ICWWS (Annexure 6.1)	92
<b>Chapter 7</b>	<b>RECOMMENDATIONS</b>	<b>93</b>
<b>I</b>	<b>Growth of Higher Education: Vision-2020 (Term of Reference-1)</b>	<b>93</b>
	Distance Education	94
	Academies for Girl Students	94
<b>II</b>	<b>Teaching Learning Process</b>	<b>95</b>
	Assignments and Seminars	95
	Field Work	95
	Continuous Evaluation	95
	Semester System	96
	Flexibility in Programmes of Studies	96
	Teachers and Students	97
	Adequacy of Teachers	97
	Students	98
	New Technology Input – Higher Education Channel	98
	Internet Connectivity	98

<b>III</b>	<b>Quality Assurance</b>	99
	State Level Testing Services	99
<b>IV</b>	<b>Good Governance</b>	100
	Decision Making Bodies	100
	Planning and Development Committee	101
	Autonomy to Colleges	101
	State Council of Higher Education	102
<b>V</b>	<b>System of Funding</b>	
	(Terms of Reference – 2 and 3)	103
	Funds from Community Sources (Term of Reference – 2)	103
	Funds from Government (Term of Reference 3)	105
	Fees and Funds	106
<b>VI</b>	<b>Challenges and Response of Internationalisation of Higher Education</b>	<b>107</b>
	To Sum Up	108

## List of Tables

Table 1.1:	Area, Per Capita Gross State Domestic Product (GSDP), Social and Economic Infrastructure and Human Development Index in Selected States	10
Table 1.2:	Literacy Rates in Selected States : 2001	10
Table 1.3:	Participation of Population in Education, 2000-2001	10
Table 1.4:	Enrolment in Higher Education Per Hundred Thousand Population (2000-2001)	11
Table 1.5:	Number of Students Per Institution in 2000-2001	11
Table 1.6:	Students' Enrolment in Selected States (excluding Panjab University Correspondence/Professional)	11
Table 1.7:	Women Enrolment in Selected States: 2000-2001	12
Table 1.8:	Enrolment of Male – Female, SC/ST Students in Panjab University and Its Affiliated Colleges, 2001-2002	12
Table 1.9:	Enrolment of Male – Female, SC/ST Students in Guru Nanak Dev University, Amritsar and Its Affiliated Colleges, 2001-2002	12
Table 1.10:	Enrolment of Male – Female, SC/ST Students in Punjabi University and Its Affiliated Colleges, 2001-2002	13
Table 1.11:	Subject-wise Percentage Enrolment of Students in Higher Education, 2000–2001	13
Table 1.12:	Level-wise Percentage Distribution of Students in Selected States, 2001	14
Table 1.13:	Subject-wise Percentage Distribution of Under-graduate Students in Higher Education	14
Table 1.14:	Subject-wise Percentage Distribution of Post-graduate Students in Higher Education	14
Table 1.15:	Subject-wise Percentage Distribution of Research Students (M.Phil and Ph.D.) in Higher Education	15
Table 1.16:	Subject-wise Percentage Distribution of Diploma and Certificate Students in Higher Education	15
Table 1.17:	Number of Candidates Appeared and Passed in the Annual Examinations, 2002	16
Table 1.18:	District – Wise Distribution of Students by General and Professional Courses in Punjab : 2000-2001	16
Table 1.19:	Annual Income of the Parents of the Students in the Sample Colleges of Punjab, 2003	17
Table 1.20:	Occupation of the Parents of the Students in the Sample Colleges of Punjab, 2003	17
Table 1.21:	Qualification of the Parents of the Students from the Sample Colleges of Punjab, 2003	18
Table 1.22:	Percentage Enrolment in Selected States 2000-01	19
Table 3.1:	Comparison of Selected Quality Parameters in Panjab University, Punjabi University and Guru Nanak Dev University	41
Table 3.2:	Number of Publications by the Faculty of Guru Nanak Dev University, Panjab University and Punjabi University (Teacher Publication Ratio)	41
Table 3.3:	Ratio of Journal and Periodical by Teachers and Departments, and percentage of Books Utility	41
Table 3.4:	Teachers' Research Projects Ratio	41
Table 3.5:	Distinctions and Awards	41
Table 3.6:	Result of UGC Lecturership and JRF Test (December 2003)	42
Table 3.7:	Rate of Wastage and Dropout	42
Table 3.8:	Number of working days in the Respective Universities, 2001-02	42
Table 3.9:	Total Grants for Quality Improvement Programmes in 2001-02	42

Table 5.1:	Percentage of Total Plan and Non-Plan Budget Expenditure on Education	73
Table 5.2:	Percentage of Plan and Non-Plan Expenditure on University and Other Higher Education	73
Table 5.3:	Plan and Non-Plan Budget for Higher Education in Punjab	74
Table 5.4:	Per Capita GSDP of States Comparable Estimates: New Series	74
Table 5.5:	Per Student Cost of Various Heads of Expenditure of Panjab University – Non-Plan, 1999-2000 Actual	75
Table 5.6:	Per Student Cost of Various Heads of Expenditure of Punjabi University – Non-Plan, 1999-2000 Actual	76
Table 5.7:	Per Student Cost of Various Heads of Expenditure of Guru Nanak Dev University – Non-Plan, 1999-2000 Actual	77
Table 5.8:	Unit Cost, Income, Surplus/Deficit in Sample Colleges of Punjab, 2000-2001	78
Table 5.9:	Per Student Receipts in Three Universities by Various Sources Non-Plan in 1999-2000	79
Table 5.10:	Per Student Contribution Towards Per Student Cost in Universities (1999-2000)	80

### **List of Annexures /Appendices and Maps/ Graph**

Map 1	PUNJAB Universities & Affiliated Colleges	6
Map 2	PUNJAB Universities & Affiliated Colleges	7
2.I	Account of the Extent/Nature of Changes, which have taken place in the Curriculum of Various Courses during the last few Years	31
2.II	Proforma for Implementation of the UGC Model Curriculum	34
4.I	Table 1: Comparison of composition of Senate in the Universities of Punjab	50
	Table 2: Comparison of number of Members in Syndicate in Universities of Punjab	50
	Table 3: Comparison of number of Members in Board of Finance/ Finance Committees in Universities of Punjab	50
	Table 4: Comparison of number of Members in Academic Council in Universities of Punjab	51
4.II	Summary of Powers of Senate & Syndicate of Panjab University, Punjabi University & Guru Nanak Dev University	52
4.III	Summary of the Proposed Model of Senate, Syndicate, Academic Council, Faculties and Board of Studies	53
4.III-A	Details of the Proposed Model for Senate for Three Universities viz. Panjab University, Chandigarh; Punjabi University, Patiala and GND University, Amritsar	54
4.III-B	Details of the Proposed Model for the Syndicate for the Three Universities	58
4.III-C	Details of the Proposed Model for the Academic Council for Three Universities	60
4.III-D	Details for the Proposed Model for the Faculties in the Three Universities	61
4.III-E	Details of the Proposed Model for the Board of Studies in Three Universities	62
5.I	Per Student Cost of Various Heads of Expenditure of Panjab University – Non-Plan, 2001-2002 Actual	81
5.II	Per Student Cost/ of Various Heads of Expenditure of Punjabi University – Non-Plan, 2001-2002 Actual	82
5.III	Per Student Cost of Various Heads of Expenditure of Guru Nanak Dev University – Non-Plan, 2001-2002 Actual	83
5.IV	Per Student Receipts in Three Universities by Various Sources Non-Plan in 2001-2002	84
Graph 5.1	Approved Estimates and the Actual Expenditure on Plan Budget during 9 <sup>th</sup> Five-Year Plan for Higher Education	73
6.1	SEED-ICWWS: Recommendations on meeting the Challenges of Internationalization	92



# 1 VISION, DEVELOPMENT AND FUTURE CHALLENGES



## The Vision

- 1.0 No state wants to be identified as an educationally, economically and politically backward one. It wishes to occupy a respectable position in the country. Yet many states, for historical, economic, political and educational reasons, are relatively better developed while others lag behind. Many states have been able to provide the basic needs of life to every citizen as well as primary, secondary and higher education to a desired proportion of its population. In order to become strong, economically competitive and to occupy a comfortable position in the country, it is very important that Punjab formulates a vision of its development and chalks out the strategies to achieve the vision in a given time frame. The first and foremost thing, therefore, is to clearly develop a vision for the future, work out a time framework for implementation, spell out the strategy and mobilize requisite resources to achieve the goal. As the knowledge era is replacing the physical capital, it is necessary to chart a clear vision of developing capabilities among human resources by providing basic education to all i.e. upto secondary level and higher education to



a large proportion of population of the state. It is necessary to participate effectively in a knowledge-oriented process of development and develop a competitive edge in the era of globalization and internationalization.

- 1.1 Even before the beginning of the new century and the millennium, India has been thinking of developing a vision. Department of Science and Technology (DST) attempted an exercise and the Vision 2020 was developed for various sectors of society. This exercise also focused on education, science and technology. The Vision for higher education, in order to respond to the challenges of knowledge-oriented society, is to develop human capital base so as to develop capabilities of higher order to meet the challenges of knowledge society. This Vision calls for development of Higher Education and R & D in the country.
- 1.2 Among the Indian States, Andhra Pradesh is the first to formulate Vision 2020 for its development. It envisions that Andhra Pradesh should become the knowledge corridor of the country. A state seeking for participation in knowledge-based society must develop and attain excellence in higher education.

### **Punjab Vision 2020**

- 1.3 States are yet to formulate their vision of development, particularly of basic and higher education systems. If higher education, being the mother of all professions, is developed effectively, the vision of development of the State is also achieved. Therefore, keeping in view the broader aspiration of the nation, the State of Punjab can hope to become economically and educationally strong and to acquire competitive edge in the globalized world. Since higher education is the key to acquire a competitive edge in a knowledge society, Punjab should aim at developing a flexible and dynamic system of higher education, which will respond to challenges of development in this globalized and competitive world. The challenges of globalization and knowledge society pertain to use of knowledge and R & D in agricultural and industrial development, efficient management of marketing of agricultural and industrial products within the country and globally, value additions through various services in agricultural and food products, professionalization of management of various supplies and services namely, electricity, water, gas, education, health, sanitation, distribution services and management of state institutions, transport and communication services, law and order management and management of national/international security, cultural development, value orientation etc. Development of R & D influences know-how to produce newer ways of production and creates a value-based system, which would enable the people to use knowledge and R & D for their well being. While doing so, Punjab should set an example for creation of knowledge assets through quality human resources for the rest of the states in the country. It is possible to conceive this vision, as Punjab has a good economic and education base and the culture of working hard. If concerted efforts are made, achievement of vision may not be a very difficult task. The time frame to achieve this vision should be 2020.

- 1.4 Keeping this broad vision in view, we review the development of education and particularly higher education in the state so as to draw lessons for the future.

### **Punjab State: Review of Development**

- 1.5 Punjab has a total area of 50.36 thousand sq. km and accounts for 2 per cent of total landmass of India. It has an average (1994-97) per capita Gross State Domestic Product (GSDP) of Rs. 18,568.33 that ranks third highest amongst the states, Goa being the first with per capita GSDP of Rs.25,075.67 and Maharashtra being the second with per capita GSDP of Rs.19,098.00. The Index of development of social economic infrastructure is 187.57, which is second highest among the states, Goa being the first with an Index of 200.57 and Kerala being the third with an Index of 178.67. The Human Development Index (HDI, 2001) puts Punjab with the value 0.537 indicating that it has gained by some points from 0.475 in 1991. The State stands at second rank, Kerala being the highest with the value 0.638 (see Table 1.1). Thus, speaking from the point of view of infrastructure and Human Development Index, Punjab is well poised to face the challenges of future.

### **Educational Development**

- 1.6 (The state had 69.95 per cent literate population in 2001, ranking at 15<sup>th</sup> position, and Kerala being at the first rank with 90.90 per cent literates. However, the State is having a relatively higher literacy rate as compared to all India average of 65.38 per cent (see Table 1.2). The rate of participation of population in education in Punjab in age group of 6-11 is 79.05 per cent and in the age group 11-14 is 64.53 per cent. Both put together, it is 73.75 per cent as compared to 81.58 per cent average for all India (see Table 1.3).
- 1.7 (The students enrolled for higher education per hundred thousand population in Punjab (2000-2001) was 1047 students, which is higher than the all India average of 812 per hundred thousand population (see Table 1.4).
- 1.8 (Thus, educational development in higher education is good, but the participation in primary and secondary education needs to be improved considerably. Participation rate in higher education is comparable to some of the states. But, considering social and economic infrastructure and the GSDP in Punjab, participation rate in higher education should be more.) In the vision of developing a competitive edge of the state in the era of knowledge society, and if the state has to rank among 1<sup>st</sup> or 2<sup>nd</sup> in education, particularly in higher education, then the development needs are to be speeded up.

## Higher Education System

- 1.9 ( There are five Universities and three hundred twenty Colleges in the State of Punjab and the Union Territory – Chandigarh. Of these, there is one technical university (Punjab Technical University, Jalandhar) and one university of health sciences (Baba Farid University of Health Sciences) supported by the state. Besides, there is one deemed to be technical university (Thapar Institute of Engineering & Technology) and one agricultural university (Punjab Agricultural University, Ludhiana) supported by the UGC and the ICAR, respectively.)
- 1.10 In terms of size of the colleges, Punjab colleges though have relatively higher enrolment per college than all India level, yet students per college can be raised to 900 – 1000 from 795. Haryana has 910, Himachal Pradesh has 824 students per college (see Table 1.5). The percentage increase in number of students is also relatively less in Punjab as compared to Haryana and Rajasthan, but higher than Himachal Pradesh and Tamil Nadu (see Table 1.6). The rate of participation of women is relatively better in Punjab and Chandigarh as compared to other states (see Table 1.7). Of the total number of students studying in Punjab, the proportion of SC/ST students in Panjab University, Chandigarh and Guru Nanak Dev University, Amritsar is higher than that of Punjabi University, Patiala (see Tables 1.8, 1.9 and 1.10).
- 1.11 The subject-wise distribution of students reveals that, in Punjab, majority of students are pursuing studies in the faculty of Arts (63.03 per cent), followed by the faculty of Science (12.13 per cent) and then the faculty of Commerce (11.26 per cent) (see Table 1.11). This does not compare well with all India trend. Average for all India figures in Arts account for 42.7 per cent only and that of Science and Commerce, it is 19.7 and 20.7 per cent, respectively (see Table 1.11).
- 1.12 As far as the level is concerned, under-graduate students in Punjab account for a large proportion, i.e. 90 per cent. A very small proportion of students are enrolled for post-graduation (7.79 per cent) and research (0.16 per cent) (see Table 1.12). It compares very poorly with States, namely, Rajasthan and Tamil Nadu.
- 1.13 The level of students, namely, under graduate, postgraduate and research reflects the level of development of human assets. An analysis of data of enrolment by levels and subjects reveals that relatively a higher proportion of under graduate students in Punjab (67.63 per cent) are enrolled for Arts subjects as compared to neighbouring states and much higher as compared to Tamil Nadu (16.74 per cent) (Table 1.13). Position more or less is the same for postgraduate students (see Table 1.14). But the number of those who pursue research even in Arts subjects is relatively less in Punjab as compared to other States. Tamil Nadu enjoys the highest number. The number of students pursuing research is also relatively less (see Table 1.15). A good proportion of students pursue research in agriculture, which is expected as it offers a greater scope for research in this area. However, a good proportion of students are doing diploma and certificate courses in science. The number of those doing diploma/certificate courses is also higher in this state

(see Table 1.16). Keeping in view the future development strategy, some restructuring of courses of studies and encouragement to students for wider choices would be necessary.

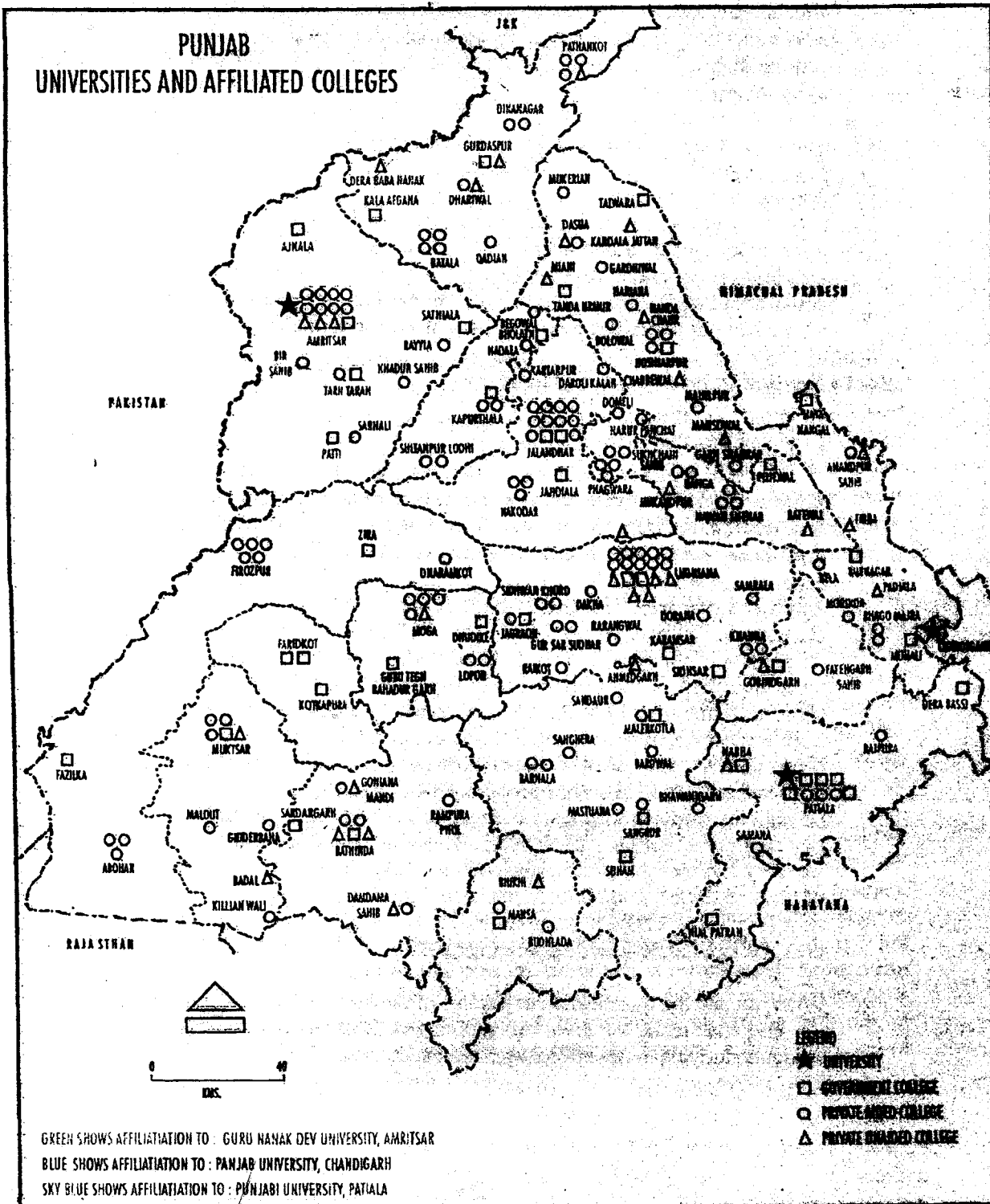
- 1.14 If we see the data regarding the pass percentage in the annual examination held in 2002, the pass percentage is generally high in both Punjabi University, Patiala and Guru Nanak Dev University, Amritsar. However, the performance in B.Com is relatively poor in Panjab University, Chandigarh (68.36 percent compared to 100 percent in Punjabi University and 92.92 percent in Guru Nanak Dev University in 2002). Generally, it is found that the pass percentage is high at the master's level. But the pass percentage in Panjab University is only around 50 per cent at the Master's level (see Table 1.17).

### **Regional Distribution**

- 1.15 The analysis of regional distribution of students in higher education among the districts of the state reveals that Jalandhar is a much better educational district with more than 1136 students per hundred thousand population, followed by Ludhiana, Kapurthala and Patiala. Of the total enrolment in professional education, the highest is in Ludhiana followed by Patiala, Sangrur, Ferozepur, Jalandhar and Amritsar. However, the districts which need urgent attention are Mansa, Fatehgarh Sahib, Muktsar, Ferozepur and Sangrur (see Table 1.18). Institutions by each district of Punjab are shown in Map 1. It would be seen that the districts which have less enrolments also have less number of institutions. Map 2 shows the regional distribution of government and private colleges affiliated to Panjab University, Punjabi University and GND University.
- 1.16 Besides the students enrolled in the formal system, a good number of students are also enrolled in the distance education programmes being offered by the Universities of Punjab as well as IGNOU and other Universities of India. Like other universities in various states, Punjab also offers women students to appear as private candidates for the degree examinations. This has given rise to private academies, which facilitate girl students in their studies. These academies are generally in under-served areas and offer a sort of service to aspiring students. With regard to these academies, opinions are divided. Those in formal system see it as an aberration and view it as affecting the quality. Those who attend these academies and their parents view it as a sort of good facility for women students who would otherwise not be able to acquire higher education for social reasons and also due to distance of the institutes of learning.



Map 2



Source: Office of the DPI (colleges), Punjab

- 1.17 The universities, in general, by way of accepting students' application forms through them, informally recognize these academies. However, universities in Punjab get the application forms also directly from the students. There are positive as well as negative views about such institutions. But the fact remains that they are helping women in under-served areas, though on payment. This might be viewed as attacking enrolment in formal colleges. This view may not be held valid as those who could afford socially and economically, they send their wards to colleges and those who could not afford this they take help of such institutions.

### **Socio Economic Background of Students**

- 1.18 Data from students of nine private colleges and twelve Government colleges located in different districts were collected. Income, occupation and educational background of parents of students reveal their social and economic background. The data of 133 samples from the private colleges reveal that those who come from higher income brackets (i.e. Rs. 80,000/- per annum and above) accounted for around 40 per cent and those from lower income brackets (i.e. below Rs. 50 thousand per annum) accounted for around 30 per cent and the rest came from middle-income group. Against these two categories (higher and lower), the comparable figures in Government colleges were around 36 and 37 per cent, respectively (see Table 1.19). Occupational background of parents of students reveals that in government colleges more than half of the students' (51.15 per cent) parents are in service sector and those in farming account for around 22 per cent (see Table 1.20). Those coming from business families accounted for 12 per cent and the rest are from shopkeepers', professionals' and other families. Mothers of more than 80 per cent were housewives. Those in service account for 14 per cent. In contrast, nearly 33 per cent of students studying in private colleges come from business families and nearly 44 per cent come from service families. Those coming from farming families were 12 per cent and those of professionals' families were 3 per cent. More than 88 per cent of these students' mothers were housewives and those in service accounted for 9 per cent (see Table 1.20). Thus, a large proportion of students came from service and business families, followed by farming families.
- 1.19 When we see the qualification of parents of students studying in government colleges we find that many of them are not degree holders whereas the parents of the students studying in private colleges are mostly degree holders (see Table 1.21).

### **Challenges**

- 1.20 ( In order to achieve the vision of Punjab to become one of the leading states in the era of knowledge society along with its desire to rise to the first from the third position in the economic status among the states, Punjab has to initiate steps to give filip for the development of higher education. In particular, it has to push up enrolment in higher education from presently 1.05 to 2 per cent of the total population. That is, from 7 per cent to 10 per cent in the eligible age group of population by the end of tenth plan and 20



per cent by 2020.) This would mean providing more opportunities to students both through public and private institutes of higher education. The existing facilities can also be used by working for more than the usual hours in a day. The challenge, therefore, is to enhance the capacity for access to higher education.

- 1.21 (Another challenge, and that too a very serious one, is the need for diversification in curriculum, subject and stream choices for the students.) Presently the system lacks diversification, and there is a lopsided participation of students in arts and social sciences. As compared to Punjab, Tamil Nadu has greater diversification. The real challenge of knowledge era is greater diversification in curriculum and wider subject choices. We consider this an important factor so as to enable the state face the challenges of future effectively.
- 1.22 (The third challenge is the rate of participation in postgraduate and research level.) This rate is relatively low. It may be due to the fact that a good number of students after their graduation may be getting absorbed in the economy. But the demand of the knowledge society is that an adequate number of PG and R & D level persons are available for the development of the state. And this cannot happen unless the rate of participation of students at PG and research level rises. This increase, however, has to be in the interdisciplinary areas directly related to the development of the state, nation and the world rather than in the conventional areas.
- 1.23 (The women participation in higher education is very good. It is almost half of the total enrolment, with an exception in engineering and technology where rates of enrolment of women students is around 20 per cent. This needs to be maintained.) This is one of the strong aspects of Punjab's higher education system as compared to many other states in the country (see Table 1.22). Even those states, which are traditionally engaged in educational pursuits, do not have comparable number. But here the weakness is that like male students most of the women enrolment is concentrated in the Arts subjects. This needs to be diversified. Along with rate of participation, subject areas participation also becomes important from the point of view of development of the state.
- 1.24 (A good number of self-financing institutions have come up in Punjab. There is a need to strengthen them further.) However, strong measures of quality control are needed to be implemented at the earliest.
- 1.25 Yet another challenge is encouraging the participation of students from the farming class, working class and small shop owners. So far, relatively a larger number of beneficiaries are the wards of service and business class. The participation of wards of working class persons is rather poor. The equity considerations require that wards of farming class, working class and those of small shop owners are supported to participate in the higher education.

**Table 1.1: Area, Per Capita Gross State Domestic Product (GSDP), Social and Economic Infrastructure and Human Development Index in Selected States**

States	Area (in 1000 sq. km.)	Per Capita GSDP 1994-1997 -Average (in Rupees)	Index of Social and Economic Infrastructure	Human Development Index	
				1991 Value	2001 Value
Punjab	50.36	18568.33	187.57	0.475	0.537
Haryana	44.21	16927.33	137.54	0.443	0.509
Himachal Pradesh	55.67	12153.67	95.03	0.469	n.e.
Rajasthan	342.24	10377.00	75.86	0.347	0.424
Tamil Nadu	130.06	13926.33	149.10	0.466	0.531
Maharashtra	307.71	19098.00	112.80	0.452	0.523
Goa	3.70	25075.67	200.57	0.575	n.e.
Kerala	38.88	13091.33	178.68	0.591	0.638

Sources: (i) Report of the Eleventh Finance Commission (2000-2005), June 2000, p.218

(ii) Economic Survey, Government of India, 2002-2003, p.212

Note: n.e. = No estimates were made for these states.

**Table 1.2: Literacy Rates in Selected States : 2001**

States	Literacy Rate (Per cent)
Punjab	69.95
Haryana	69.59
Himachal Pradesh	77.13
Rajasthan	61.03
Tamil Nadu	73.47
Kerala	90.90
All India	65.38

Source: Economic Survey, Government of India, 2002-2003.

**Table 1.3: Participation of Population in Education, 2000-2001**

State	YEAR 2000-2001 (Per cent)		
	Classes I-IV (6-11 years)	Classes VI-VIII (11-14 years)	Classes I-VIII (6-14 years)
Punjab	79.05	64.53	73.75
All India	95.66	58.64	81.58

Source: Selected Educational Statistics 2000-2001, GOI, MHRD (Department of Education), Planning, Monitoring and Statistics Division.

Table 1.4: Enrolment in Higher Education Per Hundred Thousand Population (2000-2001)

State	Total Population (in Thousand)	Total Enrolment of Students	Students per Hundred Thousand Population
Punjab / Chandigarh	24,289	2,54,425	1047
Haryana	21,083	2,19,224	1039
Himachal Pradesh	6,077	80,718	1328
Rajasthan	56,473	3,20,886	568
Tamil Nadu	62,111	6,48,140	1043
All India	10,27,015	83,39,443	812

Source: University Development in India : Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff : 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

Table 1.5: Number of Students Per Institution in 2000-2001

States	Total Enrolment	Number of Colleges	Total No. Students per Institution (Average)
Punjab/Chandigarh	2,54,425	320	795
Haryana	2,19,224	241	910
Himachal Pradesh	80,718	98	824
Rajasthan	3,20,886	420	764
Tamil Nadu	6,48,140	816	794
All India	83,39,443	12806	651

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi.

Table 1.6: Students' Enrolment in Selected States (excluding Panjab University Correspondence/Inter/Professional)

State/Union Territory	Enrolment 1999-2000*	Enrolment 2000-2001*	Increase over the preceding year	Percentage increase
Punjab/Chandigarh	2,23,577	2,35,071	11,494	5.14
Haryana	2,11,351	2,29,981	18,630	8.81
Himachal Pradesh	63,082	66,123	3,041	4.82
Rajasthan	2,67,241	2,82,836	15,595	5.84
Tamil Nadu	5,91,454	6,16,388	24,434	4.13

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

Note : \* Provisional

**Table 1.7: Women Enrolment in Selected States : 2000-2001**

State/Union Territory	Total Enrolment	Women Enrolment	Percentage of Women
Punjab/Chandigarh	2,35,071	1,20,947	51.45
Haryana	2,29,981	97,558	42.42
Himachal Pradesh	66,123	27,110	41.00
Rajasthan	2,82,836	99,996	35.35
Tamil Nadu	6,16,388	2,17,211	44.00

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.8: Enrolment of Male – Female, SC/ST Wards in Panjab University and Its Affiliated Colleges, 2001-2002**

Levels	Total Enrolment	Male	Female	Male %	Female %	Total SC/ST Enrolment	SC	ST	SC %	ST %
<b>University Departments</b>										
(i) Under Graduate	3112	2146	966	68.96	31.04	521	471	50	15.13	1.61
(ii) Post Graduate	3218	1339	1879	41.61	58.39	402	292	110	9.07	3.42
<b>Affiliated Colleges</b>										
Under Graduate	88726	37625	51101	42	58	8273	7950	323	9.32	0.36
Post Graduate	4661	1050	3611	23	77	365	365	-	7.83	-

Source : Compiled from data supplied by Panjab University, Chandigarh.

**Table 1.9: Enrolment of Male – Female, SC/ST Wards in Guru Nanak Dev University, Amritsar and Its Affiliated Colleges, 2001-2002**

Levels	Total Enrolment	Male	Female	Male %	Female %	Total SC/ST Enrolment	SC	ST	SC %	ST %
<b>University Departments</b>										
(i) Under Graduate	2226	1302	924*	58.49	41.51	206	206	--	9.25	--
(ii) Post Graduate	1715	740	975	43.15	56.85	111	110	1	6.41	0.06
<b>Affiliated Colleges</b>										
Under Graduate	66542	27249	39293	40.95	59.04	6877	6847	32	10.29	0.05
Post Graduate	7434	2418	5016	32.53	67.47	474	474	--	6.38	--

Source : Compiled from data supplied by Guru Nanak Dev University, Amritsar.

**Table 1.10: Enrolment of Male – Female, SC/ST Wards in Punjabi University and Its Affiliated Colleges, 2001-2002**

Levels	Total Enrolment	Male	Female	Male %	Female %	Total SC/ST Enrolment	SC	ST	SC %	ST %
<b>University Departments</b>										
Under Graduate	982	646	336	65.78	34.22	73	45	28	4.58	2.85
Post Graduate	2317	907	1410	39.15	60.85	110	47	63	2.03	2.72
<b>Affiliated Colleges</b>										
Under Graduate	48681	26175	22506	53.77	46.23	4056	--	--		8.32
Post Graduate	2303	993	1310	43.12	56.88	141	--	--		6.12

Source: Compiled from data supplied by Punjabi University, Patiala.

**Table 1.11: Subject-wise Percentage Enrolment of Students in Higher Education, 2000–2001**

	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu	All India
Arts	63.03	63.72	60.26	52.29	16.76	42.7
Science	12.13	10.19	19.34	14.13	36.44	19.7
Commerce	11.26	13.92	13.93	14.96	17.41	20.7
Education	1.71	1.18	0.71	2.85	1.14	1.7
Engineering & Technology	6.55	7.37	1.53	4.04	19.53	6.6
Medicine	3.88	1.52	1.63	3.53	5.83	3.3
Agriculture	0.48	0.40	1.15	0.64	0.51	0.8
Veterinary Sciences	0.23	0.32	0.23	0.17	0.23	0.2
Law	0.37	0.79	0.90	6.84	1.35	3.4
Others	0.36	0.58	0.33	0.56	0.80	0.9
<b>Total</b>	<b>224589</b>	<b>219224</b>	<b>8718</b>	<b>320889</b>	<b>648140</b>	<b>80,00,935</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.12: Level-wise Percentage Distribution of Students in Selected States, 2001**

	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu	All India
Graduate	90.02	91.80	93.35	88.05	84.88	92.39
Post Graduate	7.79	7.14	4.94	10.39	13.31	7.04
M. Phil	0.03	0.11	0.19	0.07	0.45	0.03
Ph.D.	0.16	0.48	1.03	0.49	0.71	0.04
Dip./Certificate	2.00	0.50	0.49	1.00	0.65	0.50
<b>Total</b>	<b>224589</b>	<b>217601</b>	<b>80718</b>	<b>320899</b>	<b>648140</b>	<b>7288768</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.13: Subject-wise Percentage Distribution of Under-graduate Students in Higher Education**

Subject-wise	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu
Arts	67.63	65.79	61.04	53.14	16.74
Science	10.92	9.31	19.41	13.60	33.68
Commerce	11.45	13.99	13.87	14.62	17.56
Education	1.81	1.19	0.67	3.02	1.24
Engineering & Technology	6.39	7.74	1.64	3.96	21.98
Medicine	3.55	1.44	1.65	3.37	0.06
Agriculture	0.28	0.20	0.58	0.53	0.44
Veterinary Sciences	0.16	0.16	0.21	0.16	0.23
Law	0.39	0.08	0.91	7.27	1.54
Others	0.14	0.10	0.03	0.33	0.50
<b>Total</b>	<b>202170</b>	<b>199749</b>	<b>75351</b>	<b>282544</b>	<b>550145</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.14: Subject-wise Percentage Distribution of Post-graduate Students in Higher Education**

Subject-wise	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu
Arts	55.60	49.15	49.81	50.27	15.68
Science	18.58	21.93	17.39	17.80	54.23
Commerce	10.58	15.50	17.72	17.44	18.39
Education	1.03	0.97	0.75	1.43	0.25
Engg. & Technology	2.46	4.12	0	4.94	5.53
Medicine	6.48	1.59	1.83	4.04	2.83
Agriculture	2.14	1.69	7.73	1.05	0.67
Veterinary Sciences	0.90	1.37	0.70	0.18	0.17
Law	0.26	0.29	0.68	1.64	0.32
Others	1.97	3.39	3.39	1.21	1.93
<b>Total</b>	<b>17494</b>	<b>15543</b>	<b>3985</b>	<b>33356</b>	<b>86288</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.15: Subject-wise Percentage Distribution of Research Students (M.Phil and Ph.D.) in Higher Education**

Subject-wise	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu
Arts	23.29	36.74	42.55	36.73	31.88
Science	21.18	22.19	22.29	25.25	40.47
Commerce	8.47	3.46	7.80	8.85	3.98
Education	0.24	5.51	3.65	4.31	2.81
Engineering & Technology	11.76	0.39	0	6.61	10.68
Medicine	3.76	0	0	0.34	1.25
Agriculture	22.35	16.84	18.34	10.25	2.19
Veterinary Sciences	7.29	13.14	0.30	2.35	1.21
Law	0.71	0.87	1.42	0.56	0.11
Others	0.94	0.87	3.65	4.76	5.44
<b>Total</b>	<b>425</b>	<b>1271</b>	<b>987</b>	<b>1786</b>	<b>7520</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delhi

**Table 1.16: Subject-wise Percentage Distribution of Diploma and Certificate Students in Higher Education**

Subject-wise	Punjab	Haryana	Himachal Pradesh	Rajasthan	Tamil Nadu
Arts	11.09	15.72	60.76	6.65	14.40
Science	40.98	4.78	17.97	15.92	25.58
Commerce	5.31	11.21	3.04	23.13	2.29
Education	0	0	0	1.87	3.22
Engineering & Technology	29.29	3.49	0	0	2.58
Medicine	8.69	19.30	0	14.64	40.60
Agriculture	0.51	0	0	0	3.34
Veterinary Sciences	0	0	0	0	0.14
Law	0	1.47	0	26.26	0
Others	4.13	44.03	18.23	11.52	7.83
<b>Total</b>	<b>4500</b>	<b>1088</b>	<b>395</b>	<b>3203</b>	<b>4187</b>

Source: University Development in India: Basic Facts & Figures on Institutions of Higher Education, Students Enrolment, Teaching Staff: 1995-96 to 2000-2001, (University Grants Commission, Information & Statistics Bureau), New Delh

Table 1.17: Number of Candidates Appeared and Passed in the Annual Examination, 2002

Final Year Examination	Punjabi University			Guru Nanak Dev University			Panjab University		
	Appeared	Passed	Pass % age	Appeared	Passed	Pass % age	Appeared	Passed	Pass % age
B.A.	14022	10316	73.57	13348	11260	84.36	23293	17916	76.92
B.Sc.	631	527	83.52	1725	1441	83.53	1957	1714	87.58
B.Com.	2277	2277	100.00	2687	2497	92.92	4375	2991	68.36
B.B.A.	39	30	76.92	180	174	96.67	333	307	92.19
B.C.A.	468	450	96.15	291	289	99.31	427	347	83.01
M.A.	4937	3821	77.39	103	93	90.29	9.3	4525	49.49
M.Sc.	283	261	92.26	-	-	-	437	274	62.70

Source: Compiled from the data supplied by the respective Universities in Punjab.

Table 1.18: District – Wise Distribution of Students by General and Professional Courses in Punjab : 2000-2001

Districts	Enrolment (%) General	Enrolment (%) Professional	Total Enrolment (%) (General & Professional)	Enrolment per Hundred Thousand Population (General)	Enrolment per Hundred Thousand Population (Professional and General)
Gurdaspur	8.58	5.50	8.27	713	764
Amritsar	10.60	6.59	10.21	601	642
Kapurthala	4.21	1.60	3.95	975	1017
Jalandhar	11.95	7.11	11.47	1066	1136
Nawan Shehar	2.29	1.34	2.20	681	726
Hoshiarpur	7.93	1.55	7.29	935	955
Rupnagar	2.96	6.48	3.31	464	577
Ludhiana	17.98	14.40	17.62	1033	1125
Ferozepur	5.28	7.30	5.48	527	608
Faridkot	1.70	5.39	2.07	535	725
Mukatsar	2.26	3.90	2.43	507	605
Moga	2.72	5.52	3.00	535	656
Bathinda	4.16	5.71	4.32	613	707
Mansa	1.29	----	1.16	327	327
Sangrur	5.97	11.42	6.52	520	631
Patiala	8.74	12.76	9.14	827	962
Fatehgarh Sahib	1.35	3.43	1.56	434	558

Source: Compiled from Census Operation 2001, Punjab Series – 17 and Statistical Abstracts – 2001, Government of Punjab.

Note: Excluding enrolment in Union Territory areas.



**Table 1.19: Annual Income of the Parents of the Students in the Sample Colleges of Punjab, 2003**

Types of Colleges	No. Of Colleges	No. Of Students (Sample)	Income Levels (per annum)				
			(Percentage in Brackets)				
			<i>Below Rs. 50,000</i>	<i>Rs 50,000 to 60,000</i>	<i>Rs 60,000 to Rs 70,000</i>	<i>Rs 70,000 to Rs 80,000</i>	<i>Rs 80,000 &amp; Above</i>
<b>Private Colleges</b>	9	133 (100)	41 (30.83)	17 (12.78)	4 (3.01)	16 (12.03)	55 (41.35)
<b>Government Colleges</b>	12	131 (100)	48 (36.64)	9 (6.87)	10 (7.63)	17 (12.98)	47 (35.88)
<b>Total</b>	21	264 (100)	89 (33.71)	26 (9.85)	14 (5.30)	33 (12.50)	102 (38.64)

Source: Compiled from the data supplied by the universities and colleges of Punjab.

**Table 1.20: Occupation of the Parents of the Students in the Sample Colleges of Punjab, 2003**

Types of Colleges	No. of Colleges	No. of Students (Sample)	Occupation (Father/Mother)							
			(Percentage in Brackets)							
			<i>Business (Father)</i>	<i>Housewife (Mother)</i>	<i>Service (Father)</i>	<i>Service (Mother)</i>	<i>Shop Keeper (Father)</i>	<i>Farming (Father)</i>	<i>Professional &amp; Other (Father)</i>	<i>Other Work (Mother)</i>
<b>Private Colleges</b>	9	133 (100)	43 (32.33)	118 (88.72)	58 (43.61)	12 (9.02)	13 (9.77)	15 (11.28)	4 (3.01)	3 (2.26)
<b>Government Colleges</b>	12	131 (100)	16 (12.21)	110 (83.97)	67 (51.15)	19 (14.50)	12 (9.16)	29 (22.14)	7 (5.34)	2 (1.53)
<b>Total</b>	21	264 (100)	59 (22.35)	228 (86.36)	125 (47.35)	31 (11.74)	25 (9.47)	44 (16.67)	11 (4.17)	5 (1.89)

Source: Compiled from the data supplied by the universities and colleges of Punjab.

**Table 1.21: Qualification of the Parents of the Students from the Sample Colleges of Punjab, 2003**

Types of Colleges	No. of Colleges	No. of Students (Sample)	Education Level (Father/ Mother)									
			Illiterate		Below 10th		11 <sup>th</sup> to 12th		Graduation		P. G. & Others	
			F	M	F	M	F	M	F	M	F	M
<b>Private Colleges.</b>	9	133 (100)	7 (5.26)	10 (7.52)	35 (26.32)	52 (39.10)	22 (16.54)	16 (12.03)	57 (42.86)	43 (32.33)	12 (9.02)	12 (9.02)
<b>Government Colleges.</b>	12	131 (100)	13 (9.92)	25 (19.08)	49 (37.40)	59 (45.04)	21 (16.03)	13 (9.92)	29 (22.14)	22 (16.79)	19 (14.50)	12 (9.16)
<b>Total</b>	21	264 (100)	20 (7.58)	35 (13.26)	84 (31.82)	111 (42.05)	43 (16.29)	29 (10.98)	86 (32.58)	65 (24.62)	31 (11.74)	24 (9.09)

Source : Compiled from the data supplied by the universities and colleges of Punjab.

Table 1.22: Percentage Enrolment in Selected States 2000-01

State/UT	ARTS		Science		Commerce		Education	
	Total	Total in Women	Total	Total in Women	Total	Total in Women	Total	Total in Women
Punjab	141557	79837 (56.4)	27253	15093 (55.4)	25282	12361 (48.9)	3838	2734 (71.2)
Bihar	283069	66263 (23.4)	106766	22693 (21.3)	37577	4807 (12.8)	2610	950 (36.4)
Tamil Nadu	108627	59390 (54.7)	236172	117853 (49.9)	112854	51512 (45.6)	7378	4388 (59.5)
Kerala	73941	48736 (65.9)	81194	52505 (64.7)	31143	16206 (52.0)	8934	6887 (77.1)
Goa	3428	2566 (74.9)	3475	2050 (59.0)	7695	4513 (58.6)	214	180 (84.1)
Chandigarh	16239	9020 (55.5)	5110	3235 (63.3)	3975	2164 (54.4)	524	439 (83.8)
India	3875102	1712010 (44.2)	1670263	658767 (39.4)	1500609	547342 (36.5)	109196	55923 (51.2)

Table 1.22 (contd...)

State/UT	Engineering & Technology		Medicine		Agriculture		Law	
	Total	Total in Women	Total	Total in Women	Total	Total in Women	Total	Total in Women
Punjab	14721	2815 (19.1)	8710	4875 (56.0)	1068	308 (28.8)	828	212 (25.6)
Tamil Nadu	126603	31226 (24.7)	37766	20812 (55.1)	3288	1508 (45.9)	8768	1433 (16.3)
Bihar	2160	255 (11.8)	7760	1564 (20.2)	325	72 (22.2)	24201	2237 (9.2)
Kerala	20026	6111 (30.5)	7230	3952 (54.7)	616	335 (54.4)	4766	2286 (48.0)
Goa	1711	444 (25.9)	1030	629 (61.1)	-	-	1152	618 (53.6)
Chandigarh	863	215 (24.9)	1731	992 (57.3)	-	-	836	138 (16.5)
India	576649	123992 (21.5)	262753	115557 (44.0)	50308	8773 (17.4)	267043	53337 (20.0)

Source: University Development in India, Basic Facts &amp; Figures: 1995-96 to 2000-01, UGC, New Delhi

# 2

## TEACHING LEARNING PROCESS



2.0 Lack of flexibility in the higher education system is a prime deterrent to development. The real issue in the system of higher education is the lack of flexibility. The courses, course combinations and syllabus are rigidly structured and have official seal of academic council. This makes it most difficult to change either courses or course combinations. This is reinforced by: (a) accompanying textbooks, (b) the system of examinations and, (c) institutionalization of the given process of teaching and learning. Any change or deviation is viewed as likely deterioration in standards. In contrast many teachers and scholars are well aware of flexibility in curriculum, structure of course combinations, methods of transaction of knowledge and evaluation of students in developed parts of the world. Any attempt to introduce flexibility becomes an instant casualty, as people often say it may not work in Indian or in the context of a particular State. If an example is given that it is

working in Indian context in some institutions, then response is that it may work in particular context, but it will not work in their institutional or state context. One hears that concept of autonomy to colleges may work in south Indian states, but may not work in Punjab because of different cultural contexts or different levels of socio-political and economic developments. Yet the question that arises is: how to ensure flexibility in that particular context? It would not be appropriate to brush aside their arguments casually. The issue needs to be examined carefully and an alternative which ensures flexibility in a particular cultural context should be worked out. To make the system flexible it will involve certain structural and policy changes at the institutional level.

## **Curriculum Development**

- 2.1 Curriculum development is an important determinant of the quality and effectiveness of higher education. Nothing more profoundly articulates the value of an educational institution than the curriculum. Syllabi of various subjects and the changes in its scope and coverage must respond to the socio-economic needs of society. It is not wrong to say that the effectiveness of user organizations depends to a large extent on the quality of curriculum of various courses and the effectiveness with which teaching learning systems are carried out. Therefore, every effort should be made to include the relevant and up-to-date issues in the scope of various subjects. This requires both the association of experts in various fields in the development of curriculum and at the same time continuous Faculty improvement so that there is no resistance on the part of the latter to the induction of latest issues/developments in the syllabi.

## **Organizational Structure for Curriculum Development**

- 2.2 Organizational structure for curriculum development includes Committees and Boards, which are responsible for basic development and periodic changes in the syllabi for various courses. In all the Universities of Punjab, the framework and procedures for the development of curriculum is more or less similar. This is so because the system prevailing in Panjab University (which is a very old and well established university), has been adopted with minor changes in Punjabi University and Guru Nanak Dev University when they came into existence.
- 2.3 The basic organizational level/committee responsible for development of syllabi is the Board of Studies. The Board works as a development team, a group of individuals with different strengths who work together on the task of curricular development. It consists of a variety of talents, which is important in curriculum development. No matter what process is followed there is a need for many different skills and strategies. This need for many talents also suggests that an important issue will be the interface between the different stakeholders. Mostly the universities have two separate Boards in each subject of study. Board of Postgraduate Studies is responsible for framing detailed curriculum for the PG courses and Board of Undergraduate Studies takes care of the undergraduate

courses. The recommendation of Board of Studies is forwarded for consideration of Faculty, which is an inter-disciplinary body. Although the agenda for Faculty meetings includes two major issues – the detailed curriculum and the ordinances, but usually no major change in the syllabi takes place at the level of Faculty. As per current practice, the Faculty can incorporate only minor changes.

- 2.4 In case the members of Faculty have some serious reservations involving major changes in the syllabus, the issue is usually referred back to the Board of Studies, which would mean that practically the concerned change is deferred for almost one year, as the next meeting of Faculty would be held almost after a year. In certain Faculties, like the Faculty of Social Sciences/ Arts, the Faculty of Physical Sciences, the Faculty of Languages etc., the membership/size is so large that it is not conducive to any meaningful discussion on the syllabi. The recommendations of the Faculties are placed before Academic Council for final approval. Usually no change in the detailed syllabi is made at the level of Academic Council. In some cases the authority for final approval of syllabi has been delegated to Faculty. It has been observed that due to large size and absence of technical experts any qualitative improvement in the curriculum is generally not possible beyond Board of Studies. Thus, except for inter-disciplinary issues, not much purpose is served by referring the detailed curriculum either to Faculty or to Academic Council.

### **Composition of Board of Studies and Other Committees**

- 2.5 The present composition of Board of Studies seems to be more or less appropriate. Postgraduate Board of Studies includes all professors in the concerned department, some readers and lectures. There is a provision for the nomination of a couple of external experts on the Board of Studies. The undergraduate courses are mostly conducted in the colleges. Therefore, the Board of Undergraduate Studies has a greater representation of college teachers. In the case of Panjab University, there are elected members on the Board but in case of Punjabi University and Guru Nanak Dev University, the Board comprises ex-officio and nominated members only, except the Board of Undergraduate Studies which carries an elected representative from the concerned Board of Postgraduate Studies.
- 2.6 As mentioned earlier, the size of Faculties and Academic Council is too large for a meaningful discussion on the syllabus. These bodies need to be restructured so as to become relevant and useful.

### **Changes in Curriculum**

- 2.7 The Board of Studies and Faculties meet once or twice a year to deliberate and finalize syllabus. As per current practice the curriculum is finalized usually for a period of two to three years. Although the Board meetings are held every year, but only minor changes are made in the syllabi. Only in subjects/disciplines, which involve a direct study of environment and public policy, the syllabus has undergone some changes as necessitated by changes in the socio-economic environment or

state policy (e.g. subjects like Management, Information Technology, Commerce, Economics etc. have undergone some changes in syllabi). In some disciplines, only minor changes in the syllabi have taken place (See **Annexure-2.I**). UGC had issued Model Curriculum in different subjects. Some of the universities have accepted to introduce these suggestions in their curriculum (See **Annexure-2.II**).

- 2.8 It is important to note that we are passing through a period of fast technological, social and cultural change. As the obsolescence rate is very high in most disciplines during this period, the changes in curriculum as also in pedagogy must keep pace with it so as to ensure that courses do not lose their socio-economic relevance.
- 2.9 An overview of the extent and type of changes that have taken place in the curriculum indicates that the syllabus of the postgraduate courses has changed more frequently in response to socio-economic developments. At the undergraduate level, the internal resistance to change seems to be stronger. Further, it is observed that the syllabus of undergraduate courses being conducted at the University departments had undergone more frequent changes in comparison to undergraduate courses being conducted in the affiliated colleges. (**Annexure-2.I** gives a sample of changes in the curriculum of various courses in the state during the last few years).

### **Uniformity in Curriculum**

- 2.10 There has been a feeling in Administrative/Government circles that the syllabi of various courses at least at the undergraduate level should be uniform through out the state so that the students do not face any problem when they have to shift from one College/University to another as a result of the transfer of their parents from one place to another. There can be difference of opinions on the merits of having uniform syllabi. If all Universities have to go for a uniform syllabus, the very justification for establishing different Universities would be defeated.
- 2.11 An alternative to formulating uniform courses at under-graduate and/or post-graduate levels is to design course in terms of credits and credit hours with a wide choice to the students to choose papers. There should be a uniform/standard criterion for all Universities in the State that a certain number of minimum credits are required in order to qualify for a degree. At the same time, depending upon the availability of resources, a very wide choice of papers/subjects should be made available to the students. It hardly matters whether a student has offered one paper or the other as long as he/she qualifies the minimum requirement of credits. Once this system is followed, the demand for uniformity of curriculum would disappear and there would be no problems in migration of students from one University to another. An added advantage would be that Universities will have the freedom to experiment with their ideas.

- 2.12 The other alternative is to follow UGC guidelines on curriculum with minimum changes to suit local needs.
- 2.13 It has been noticed that the rigidity in the formulation and implementation of curriculum creates problems in teaching. In Information Technology (IT) courses, for example, the practice of formulating syllabi nine months to 2 years in advance renders some portions of syllabi out of date due to very fast developments in the subject. Similarly, not much purpose is served when a syllabus is prescribed but infrastructure and software for teaching of some of the topics are not available in certain colleges. In such situations, a built-in autonomy for teaching alternative topics/papers could be provided in the curriculum.

### **Decentralized Decision-Making**

- 2.14 Decision-making needs to be decentralized by allowing Boards of Studies to decide the curriculum. A certain proportion of course should also be left to be decided by the individual teacher and the learner. Board of Studies of a particular subject should necessarily review and update curriculum every three years. The Boards' decision should be deemed final. Board of Studies should necessarily have two practitioners and one eminent scholar of that particular subject, wherever possible.
- 2.15 The Boards of Studies may also work out the detailed unitization and credit hours for each of the courses. A particular subject Board of Studies should do this. The details of unitization and credits should be made available in prospectus of the department with the calendar of events.
- 2.16 The Academic Council should take only broad policy decisions with regard to duration of a degree, diploma certificate course, total number of credits for a course and the number of credits a student needs to earn to be eligible for the award of degree. This is necessary for maintaining the comparability and standardization of different courses and programmes. All decisions with regard to courses, course combinations, reference and reading material, method of transaction of knowledge and methods of evaluation and appointment of examiners should be left to the Board of Studies and teachers, wherever applicable. Once this decentralized decision-making is allowed, those who are taking decisions and implementing it be made accountable. The method of accountability be based on monitoring through sharing of information and transparency in evaluation.
- 2.17 First step towards the transparency should be to make curriculum, course structure, method of transaction and method of evaluation of students and answer scripts of question papers, evaluation of assignments/experiments, the field and project work and their awards known to students. This is essential for maintaining the transparency. Secrecy is the source of inefficiency and discrimination. This would necessarily mean that the system of examination has to be both internal and external and answer scripts are returned to students after evaluation.



## Affiliated to Autonomous College

- 2.18 Yet another aspect of centralized decision making is rigid structure of affiliated colleges. Each of the universities in Punjab has nearly 100 colleges affiliated to it. The relationship between colleges and university is that of superior and subordinate. The curriculum is decided by the university, the colleges carry out teaching and the universities conduct examinations for the award of degree. It is this system which makes most of higher education in India as well as in Punjab prototype and inflexible. It also distinguishes between university and college teachers. Often college teachers have to play a second fiddle role to university teachers. The university system, because of high number of affiliated colleges, becomes like a monolith. One of the immediate policy shift needed is to change this academic structure from affiliated to autonomous colleges. Let the colleges decide about the curriculum, course combinations, teaching-learning process, evaluation of students and award of the degrees. This age old, out lived system of affiliated colleges should give way to the concept of autonomous colleges. These colleges may associate with any university for academic interaction, mutual benefit and cooperation. Of course, university faculty should be compensated for providing help and support to colleges and similarly colleges should also be compensated for carrying out work on behalf of the university such as joint training and research. This change would help in decentralized decision making and in introduction of flexible course structure and seriousness in teaching-learning process.
- 2.19 This change should be coupled by a strong system of assessment and accreditation both by professional bodies and/or state supported bodies. Autonomy should be accompanied by accountability.
- 2.20 The policy decisions that need to be taken are to allow colleges to award degrees and setting up a strong mechanism of quality assurance and assessment of each of such institutions as well as other institutions.
- 2.21 The structural and policy changes, namely, decentralized academic decision making by Board of Studies at the university level and the Board of Studies at the respective college level with recognition of colleges to award their own degrees would lay basic ground for implementing the concept of flexibility in courses, combination of courses, unitization of courses, assignments of credits, flexibility to transfer credits from one institution to other, introduction of semester system and internal and external assessment would make the system dynamic and ever changing with the needs of time. Though there will be resistance in carrying out structural and policy changes, owing to apprehensiveness that the system may become anarchic or deteriorate, yet these changes will be essential to reform the system to meet the challenges of future.

## Curricular Reforms and Capability Building

- 2.22 Having done so, the next question that would arise is equipping the Principals, Managements (both Government and Private colleges) and the institutions to cope up with these changes. It would mean preparing the mindset, providing skills and financial support towards this end.
- 2.23 For equipping teachers for curricular reforms, very good institutional mechanisms to provide knowledge and skill inputs have been developed in the form of Academic Staff Colleges by UGC. Yet another mechanism is curriculum development Centres/subject panels initiated by the UGC. These Centres, whereas may provide latest inputs in the curricular reforms in the respective subjects, these might at times may or may not appreciate changes particularly in the area of multi-disciplinary subjects, (as these centres are subject oriented) as well as needs of Punjab. Two steps would be necessary to initiate the change – a discussion with subject panels and the creation of multidisciplinary subject panels – focusing on needs of the State with the University and Colleges and coordination of the same at the State level. We would suggest that Punjab should set up State Council of Higher Education. This Council may coordinate academic aspects, planning & development aspects as well as coordinate with UGC and other central bodies. The constitution of this body, its functions and role is given in the guidelines on State Councils of Higher Education issued by the UGC.
- 2.24 The panels may provide basic inputs, but details should be left to individual institutions. Institutions should develop their own curricular programmes. In fact, subject panels should be linked with Professional Associations. One of the major responsibilities for peer group associations should be to discuss the curricular reforms and introduction of multidisciplinary aspects. However, their suggestions should be recommendatory. The final decisions should be left to individual institutions and to the teachers of the subjects. The input of panels and centres should only provoke thinking and not expect the teachers to just follow what such groups have suggested. However, what would be most needed is to develop a good data/information base on each of the subjects by taking into account the developments at the national and international levels. The database should become a source of development of contents of curriculum. The institutional mechanism of Academic Staff Colleges should be used for development of knowledge, skills and mindsets for curricular reform and development. These two institutional mechanisms should be used for curricular reforms, skills and knowledge development, unitization/credit development, semesterization, alternative methods of transaction of knowledge and evaluation of students. A detailed write up on these aspects in modular form be developed and transacted during the orientation programmes and specifically designed programme of a short duration, which also should be conceived as part of professional development of teachers for implementing these reforms.

## Professionalising Traditional Courses

- 2.25 The curricular reforms should also focus on professionalising conventional courses. Some years back, the UGC had initiated a scheme of restructuring of undergraduate courses. Under this scheme, besides flexibility in course combinations, one of the aspects was the application of theory; for example in Chemistry – applications can be in industry, agriculture, medicine and so on. Similarly, Economics could also be application oriented in different areas namely; marketing, finance and so on which will make the courses professionally oriented. This could be valid for any subject. The professionalization could also be through combining inter-related subjects like - economics, mathematics and computer applications, commerce, marketing and management.
- 2.26 Coupled with theory and application aspects, there was the foundation course – which was aimed at enhancing general understanding of social and scientific aspects and orientation of students towards issues of national development. The components were as follows:

### Weightage in Percentage

A.	Foundation	5-10
B.	Theory	0-75
C.	Applications	10-15
D.	Skill Development	5-10

- 2.27 However, this worked only in selected universities and colleges, but did not pick up in general. Now application aspect is being attempted to be achieved by introduction of one of the subjects as vocational subject at the under graduate level. What one would need is to make them professional by adding and offering enrichment programmes to enable them to enter into professional areas as a worker or as a student for higher studies. This would require to change present combinations and the concept of one vocational subject. Instead of one subject, there could be more interrelated subjects. The making of conventional courses as professional one is to make them application oriented. This would require reorientation of subject combinations, methods of teaching and methods of evaluation. Further, in the present and future context, every student and teacher has to be compulsorily equipped with skills of information technology. This is really the most important academic matter of human resource development. Full details of this in a single and multidiscipline colleges have to be worked out. This would need involvement of a large number of teachers and experts. This would also again need to be done at the decentralized level, i.e. at the institution level and in collaboration with the universities. Once the structural change in terms of autonomous colleges or the colleges having authority to award degree and decision on curriculum by the Board of Studies is done, the above changes could be implemented.

### **Choice by Students**

2.28 Thus far we have discussed about the structural and academic aspects of reforms in higher education. One major aspect of flexibility is also allowing students to make their choice from a wide range of programmes. As the institutions would be able to make their own decisions, so are the teachers about the aspects which they think are important and relevant to be taught to students. Students should have a choice to decide about the courses and levels/credits. They would like to choose out of the wide-ranging courses/modules and units. Such choices, besides reflecting what the students generally demand will also make the teaching-learning process effective and interesting because the students would be committed to their choices. This is not a new concept and has been working in many parts of the world, but it may be new in Indian context. It is the need of the time to give decision making power to students so as to involve them in the teaching-learning process seriously.

### **The Semester and Credit Based System**

2.29 The choice by students will not be possible unless the syllabus of the programme of studies is modularized and credit is assigned to each of the module. And students are given the choice to choose the module and earn credit. Accumulation of prescribed credits should enable the student to get the degree. The system should necessarily be changed from Annual Examination to Semester System or Credit Based Examination System. The later one would be much more useful and future oriented. It will also make the system more flexible as well as comparable to international standards.

### **Improving Teaching-Learning**

2.30 Besides out dated curriculums, one of the weakest aspects is teaching-learning process. The process is more oriented towards examination and memorizing the subject matter. This orientation basically defeats the purpose of learning and application of learning in the real life situation. Often, people remark that our graduates are unemployable. When such remark is made, it implies that either the body of knowledge imparted to them is not relevant or the skills they have acquired are not good enough to enable them to apply in real life situations. It also implies that enough rigour is not applied in the process of teaching and learning. Frankly speaking our process of teaching and learning is equally out dated as our curriculum. Several new methods of teaching and learning have been introduced in many places in the world. But we continue to practice the old one. Therefore, new methods namely, problem solving, application orientation and critical thinking need to be implemented in general higher education. The process of teaching and learning process should incorporate interactive, application oriented and problems solving methods of teaching and learning. Students should be equipped to apply the knowledge in the real life situation.

### **Internationally Comparable Degrees**

- 2.31 Today students are prepared not only to work in India, but also abroad as well as in multinational corporations. The flexibility, relevant programme, application skills would enable them to acquire internationally competitive knowledge and skills.
- 2.32 Yet another aspect of latest development is that several countries have started marketing their higher education programmes in India. Such programmes have to be necessarily of international standards. If we wish to be comparable and possibly also want to export some of our higher education then it should be of international standards. Our degrees should be comparable to those of leading universities in the world. Operations of foreign universities in India would invariably make students compare the curriculum, teaching-learning process and methods of evaluation between foreign and Indian universities. Those who can afford to pay may choose to study in foreign universities, yet others will demand a comparable quality form Indian universities. Therefore, the level of quality of higher education, on average, has to be comparable to that of average of institutions in other countries as well as comparable to internationally excellent institutions. This would necessarily require a firm policy on financing of higher education and adequate financial support to institutions of higher education.

### **State Testing Service**

- 2.33 Further to curricular and structural reforms, there is a need to opening of the method of certification and awarding degrees as well as standardization of certificates and degrees. One of the methods through which standardization is done is a competitive test - Tests, interview, screening or State level eligibility test. There should be a method of testing at the state level which would ensure minimum or required level of knowledge and skill attainment for a particular certificate or a degree. There is no system of national or variant of it at the state level for testing the required level of attainment at the bachelor's and master's degree levels as well as allowing every person to undertake this test and acquire the degree. Once every college is allowed to award degree, which should be valid, it may be appropriate to ascertain a minimum/required level of attainment by the students. Thus there is a need for establishing State level testing mechanism to ensure comparable and required level of attainment among the degree holders. This testing opportunity should be available to any student at any number of time at least twice and thrice a year. In course of time, when every graduate becomes familiar with computers, evaluation could be through computers and it could be available at any point of time. The concept needs to be seriously considered and modalities worked out. This would add to the concept of flexibility in real sense of the term by introducing various channels, namely, formal system, distance mode and self-learning mode. It would create possibility of acquiring the degree at any stage in life of a person. In the context of internet based education and video based knowledge resources which are being made available through out the country, the approach of self learning would become increasingly important. This might appear to pose a threat to

conventional system, but it may really not do so. As the experience in other areas shows, the opening up and creating new channels does not reduce the relevance and importance of formal channel. It rather meets the needs, which are so far neglected or ignored.

### **Use of Technology**

- 2.34 A word about technology use in education is also pertinent here. UGC has launched 24-hrs higher education channel. It is proposing to provide internet connectivity to colleges, as more than 130 universities have already been provided with internet connectivity. Detailed recommendation to this effect is made in Chapter-VI. Here it would suffice to mention that use of this technology in face to face and self learning should be encouraged.
- 2.35 The above reforms are essential to make the system of higher education dynamic so that it can cope up with the fast changing situations in the area of knowledge and human resource development.

**Account of the Extent/Nature of Changes, which have taken place in the Curriculum of Various Courses during the last few Years**

**MATHEMATICS**

Undergraduate level:	1 <sup>st</sup> and 2 <sup>nd</sup> Year	No change
	3 <sup>rd</sup> Year	Change of some topics
Postgraduates level:		Some topics changed

**SOCIOLOGY**

Undergraduate level:		Minor change
Postgraduate level:		On the advise of Punjab Government the following options have been added.  Sociology of Environment, Women Studies

**PUNJABI**

Undergraduate level:		Major changes
Postgraduate level:		Major changes

**SANSKRIT**

Undergraduate level:		Topics relating to environment included
Postgraduate level:		Some changes in line with UGC syllabus

**THEATRE & T.V.**

No change during the last 5 years

**PUBLIC ADMINISTRATION**

Undergraduate level:		Optional paper introduced on environment policy and administration
Postgraduate level:		New subjects introduced
Religious Studies:		Minor changes

**BOTANY**

Undergraduate level:

Major change keeping in view the syllabus of IAS, PCS, IFS, NET, GATE, and other competitive examinations.

**FOREIGN LANGUAGES**

Minor changes

**COMPUTER SCIENCE AND ENGG.**

Undergraduate &amp; Postgraduate:

Major change at all levels

**ENGLISH**

Postgraduate level:

Substantial changes including new papers

**ZOOLOGY**

Minor changes

**PHYSICS**

Minor changes

**FORENSIC SCIENCE**

Minor changes

**LIBRARY & INFORMATION SCIENCE**

Undergraduate level:

Minor updating

Postgraduate level:

Major changes including introduction of Computer Information in Library Science.

**SPORTS SCIENCE**

Postgraduate level:

Major changes: Introduction of Yoga and Health Science in the course

**STATISTICS**

Postgraduate level:

Minor changes

Undergraduate level:

Introduction of new B.Sc. Level Programme

**ECONOMICS**

Postgraduate level:

Minor changes

Undergraduate level:

Introduction of new B.Sc Hons. Courses in place of B.A Hons. School course.

**BUSINESS MANAGEMENT**

Postgraduate level:

Major changes: introduction of WTO, related developments, changes in financial markets etc.

**COMMERCE**

Undergraduate level:

Minor changes

Postgraduate level:

Major changes



**List of New Courses in emerging Areas that have recently been started in the Teaching Departments of Panjab University and its Affiliated Colleges**

**I. University Teaching Departments**

1. B.E. (Information Technology)
2. B.E. (Electronics and Electrical Communications)
3. B.E. (Bio-Technology)
4. B.E. (Mechanical Engineering)
5. B.E. (Electrical Engineering)
6. B.E. (Food Technology)
7. M.Sc. (Human Genomic)
8. M.Sc. (Environmental Science)
9. B.A. LLB. 5-years course
10. B.Sc. (Hons. Sch.) Computer Science
11. B.Sc. (Hons. Sch.) Bio-technology

**II. Affiliated Colleges**

1. B.Sc. Bio-technology
2. B.Sc. Bio-Informatics
3. B.P.Ed. (4 years course)
4. Post-graduate Diploma Mass Communication
5. Post-graduate Diploma Tourism

In addition, a large number of add-on courses have been started, in the affiliated colleges, based on UGC guidelines.

## Annexure 2.II

## Proforma for Implementation of the UGC Model Curriculum

Name of the University: Panjab University, Chandigarh

Sl. No.	Name of the Subject	Class	Adopted in fully	Adopted with Alteration	New Curriculum Prepared based on the UGC Model Curriculum	Date of Implementation/ Session	Remarks if Any
1.	Botany	B.Sc. (Gen.)/ B.Sc. (H.s.)/ M.Sc. (H.S.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
2.	Zoology	B.Sc. (Gen.)/ B.Sc. (H.S.) M.Sc. (H.S.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
3.	Geology	B.Sc./M.Sc. (H.S.)	-	Yes	Yes	2003-04	-
4.	Microbiology	B.Sc./Msc. (H.S.)	-	-	-	Nil	Standard higher than UGC
5.	Mathematics	B.Sc. (Gen.)/B.Sc. (H.S.)/M.Sc. (H.S.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
6.	Chemistry	B.Sc. (Gen.)/ B.Sc. (H.S.)/ M.Sc. (H.S.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
7.	Statistics	B.Sc. (Gen.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
8.	Physics	B.Sc. (Gen./B.Sc. (H.S.)/M.Sc. (H.S.)/ M.Sc. TYC	-	Yes	Yes	2003-04	-
9.	Anthropology	B.Sc. (H.S.)/ M.Sc. (H.S.)/	-	Yes	Yes	2003-04	-
10.	Bio-Chemistry	B.Sc. (H.S.)/ M.Sc. (H.S.)	-	-	-	Nil	Standard higher than UGC
11.	Bio-technology	M.Sc. (TYC)	-	Yes	Yes	2004-05	-
12.	Home Science	B.Sc. (Gen.)/ B.Sc. (Pass Course) and various M.Sc. Home Science	-	-	-	Nil	Standard higher than UGC
13.	Library and Information Science	M.Lib.Sc.	-	Yes	Yes	2003-04	-
14.	Ancient Indian History, Culture and Archeology	BA/MA	-	Yes	Yes	2003-04	-
15.	Economics	BA/MA	-	Yes	Yes	2003-04	-
16.	Political science	BA/MA	-	Yes	Yes	2003-04	-
17.	Public Administration	BA/MA	-	Yes	Yes	2003-04	-

18.	History	BA/MA	-	Yes	Yes	2003-04	-
19.	Mass Communication	Master of Mass Communication	-	Yes	Yes	2003-04	-
20.	Geography	BA/MA	-	Yes	Yes	2004-05	-
21.	Sociology	BA/MA	-	Yes	Yes	2004-05	-
22.	Psychology	BA/MA	-	Yes	Yes	2004-05	-
23.	Philosophy	BA/MA	-	Yes	Yes	2003-04	-
24.	B.Com	1 <sup>st</sup> 2 <sup>nd</sup> and 3 <sup>rd</sup> Honours	-	Yes	Yes	2003-04	-
25.	Management	M.Com	-	-	-	Nil	-
26.	Hindi	BA	-	-	-	Nil	Under consideration
		MA	-	-	Yes	2005-06	Under consideration
27.	English	BA/MA	-	Yes	Yes	2004-05	-
28.	Russian	BA/MA	-	Yes	Yes	2003-04	-
29.	French	BA/MA	-	Yes	Yes	2003-04	-
30.	Sanskrit	-	-	-	-	Nil	Under consideration
31.	Law	-	-	-	-	Nil	-
32.	Education	BA/MA/B.Ed./M.Ed.	-	Yes	Yes	2002-03	-

Source: Panjab University, Chandigarh.

# 3

## QUALITY ASSURANCE



3.0 The key concern in higher education is its quality. Higher education is expected to nurture excellence and generate knowledge. An in-depth study of subject matter followed by exploration of new ideas is required for generation of new knowledge. It also envisages preciseness and logical exposition. It means quality of what is taught and expounded has to be of high order. It is precisely for this reason that every where in the world quality of higher education has been a key concern. This aspect was incorporated in the constitution of India and the central government was given the responsibility to maintain and coordinate the standard in higher education.

3.1 The Government of India, with a view to implementing this mandate set up University Grants Commission under an Act of Parliament in 1956. This body worked to support the universities and colleges to maintain standards through various schemes, guidelines and five yearly reviews. This was mainly an

input oriented support for quality assurance. To supplement it, the UGC has set up a body for external quality assurance, named as National Assessment and Accreditation Council on the similar pattern as prevailing in many parts of the world. This body has assessed all the three universities and 72 colleges in Punjab till Feb. 2005. The remaining colleges, therefore, need to offer themselves for external review. Prior to this, each of the colleges is required to undertake self-study of their strengths and weaknesses. Such assessment would be for individual institution and grading would indicate its level of quality. This would, however, not reflect the quality of the whole system of higher education in the state. It would be advisable if all the institutions' performance is aggregated or certain common parameters to indicate system's performance are developed. Some of the important parameters of the system's performance & quality could be mentioned here:

1. Curricular reforms and diversification of courses of studies
2. Quality of teachers and their performance
3. Library facilities and their use
4. Teacher research project ratio
5. Distinction, award and fellowship received by the teachers
6. Rate of success in JRF and NET of UGC or SLET or UGC-CSIR test
7. Rate of participation of students at Postgraduate and Research level
8. Rate of wastage and drop out in the system
9. Observance of Academic Calendar and number of teaching days.
10. University Departments/Colleges receiving special assistance from the UGC, Central & State Government Agencies
11. Per unit cost of graduate, post-graduate and doctoral output
12. Proportion of institutions accredited by NAAC and so on.

3.2 An attempt has been made to assess the quality of system of higher education of Punjab on some of these parameters depending on availability of data/information:

### **Curricular Reforms and Diversification of Programmes of Studies**

3.3 An analysis of curricular reforms in chapter II shows that reforms have been very slow and a few. Most of the universities and the colleges have continued with the old system. Changes in syllabi at under-graduate level have been very few. System of teaching and learning and evaluation of students have remained the same, but for few professional oriented programmes/studies. A large proportion of students continue to pursue traditional programmes of studies. Therefore, in order to orient the system towards quality, semester system needs to be introduced. Syllabi of

under-graduate studies need to be reformed to include relevant courses of studies. Wider choices need to be given to students to diversify the system and nurture wider capabilities. Diversification of courses of studies is just being initiated and some changes have been introduced in some colleges and universities recently. This needs to be kept up and further promoted. The syllabi in universities of Punjab should match with the syllabi prescribed for competitive examinations to ensure greater participation of students from this region in various services and professions.

### **Quality of Teachers and their Performance**

- 3.4 The quality of teachers could also be seen in terms of those who have completed Ph.D. and qualified the NET examination as well as the number of teachers with experience as reflected in their research performance. Of the 737 permanent teachers in Panjab University, 81.42 percent had Ph.D. degree; that for Punjabi University the ratio was 78.42 percent out of 403 permanent teachers; and that for GNDU, out of 376 permanent teachers, 66.23% had Ph.D. For temporary teachers, the ratio was much less for all the three universities (see Table 3.1).

### **Teacher - Publication and Research Students Ratio**

- 3.5 The data on publication of books reveal that in Guru Nanak Dev University, that there is one book for 16.1 teachers and less than one article per teacher i.e. 1:0.91. Whereas in Panjab University, for about 28.1 teachers there is one book and less than one paper publication per teacher i.e. 1:0.8. The rate of publication needs an improvement. Average for both books & articles works out as 1:1 for GNDU and 1:0.8 for Panjab University. For every 5.4 teachers, there is one research student in Panjab University and for every 5.2 teachers there is one research student in GNDU (see Table 3.2).

### **Library Facilities and their Use**

- 3.6 The per teacher ratio of journals and periodicals is higher in case of GNDU (1:1.38) followed by Punjabi University (1:1.2) and Panjab University (1:0.82). Similarly, number of journals subscribed per department is higher in GNDU as compared to Panjab and Punjabi Universities. Number of utilization ratio of books is higher in Panjab University as compared to other two universities (see Table 3.3).

### **Teacher - Research Project Ratio**

- 3.7 The ratio of teachers' research projects – ongoing and completed – indicate that nearly for 10 teachers there is one ongoing research project in Panjab University. This ratio is slightly higher for Punjabi University and Guru Nanak Dev University. A similar position is seen for research projects completed. The ratio ranges between 1:0.09-1:0.12 (see Table 3.4).

### **Distinction and Awards**

- 3.8 Panjab University has 18 patents to its credit. Information on this aspect for other universities was not available (see Table 3.5). In general, the academic background of permanent teachers is good, but temporary teachers need to upgrade their qualifications. The proportion of teachers attending staff development programmes needs slight improvement.

### **Junior Research Fellow (JRF) and Senior Research Fellow (SRF)**

- 3.9 The data pertaining to students who appeared and passed JRF and Lecturership tests held by UGC in the month of December 2003 reveal that about 7.4% and 8.3% cleared Lecturership test, respectively, by Panjab University and GNDU students. Data for Punjabi university are not available. Similarly those who passed Junior Research Fellowship test accounted for 1.35 and 1.90 per cent, respectively, for Panjab and GND Universities (see Table 3.6).

### **Rate of Participation in PG and Research Level**

- 3.10 The rate of participation in PG and Research level is relatively poor in Punjab as compared to some of the states as shown in data presented in Chapter 1. Punjab needs to encourage PG and Research level participation of students.

### **Rate of Wastage and Dropout in the System**

- 3.11 Higher the rate of dropout and failure, poorer is viewed the quality of the system and vice-versa provided the system of evaluation is objective and fair. Rate of failure in the universities ranges between 30 to 50% at under-graduate level and 15 to 40% at post-graduate level. This rate is significantly high. (see Table 3.7). This needs to be reduced.

### **Academic Calendar**

- 3.12 Universities and colleges work for less than the number of days prescribed by UGC Regulations. UGC prescribes 200 working and 180 teaching days. The number of days for which the higher education system works in Punjab ranges between 180-194 days. A review of holidays and vacation needs to be done (see Table 3.8).

### **UGC Assistance for Quality Improvement**

- 3.13 Data pertaining to UGC grant for quality improvement indicate that of the total grants received by three universities, Panjab University and GNDU account for most of the grants, i.e., 49 & 47 per cent, respectively. Share of Punjabi University was negligible, nearly 3 per cent only (see Table 3.9).

### **Unit Cost of Students**

- 3.14 Unit cost of students for UG, PG courses and research students is given in Chapter 5. The data reveals that unit costs for these three universities are nearly Rs. 100 thousand. This is substantially high cost. System needs to be little more cost effective.

### **Accreditation by NAAC**

- 3.15 Whereas all the three universities have been accredited by NAAC at five star status, the number of colleges accredited by it is 72. In general, a good number of colleges, i.e., 22, got A+ / A grade.
- 3.16 The Committee is of the view that state Government needs to evolve a system of regular assessment of higher education on the selected parameters. A system of proper data base needs to be developed for assessment of higher education. This should become a guiding force for strengthening the quality of higher education in the State. Every institution should have internal quality assurance mechanism. Self study should be part of regular activities of the institution. External review by national agency like NAAC should become mandatory for every institution.
- 3.17 It should also be mandatory for the government to assess the system on the above parameters every three years and submit the report to legislative assembly.



Table 3.1: Comparison of Selected Quality Parameters in Panjab University, Punjabi University and Guru Nanak Dev University

Sl. No.	Subject	Panjab University	Punjabi University	G.N.D. University
I	<b>Permanent Teachers</b>	737	403	376
	% With Ph.D.	81.42	78.42	66.23
	% With M.Phil	5.83	5.45	6.38
	% With P.G.	12.75	16.13	27.39
II	<b>Temporary Teachers</b>	52	30	14
	% With Ph.D.	63.46	53.34	21.43
	% With M.Phil	7.69	3.34	-
	% With P.G.	28.85	43.32	78.57
III	<b>Grand Total</b>	789	433	390

Table 3.2: Number of Publications by the Faculty of Guru Nanak Dev University, Panjab University and Punjabi University (Teacher Publication Ratio)

Name of the University	Number of Departments	Number of Teachers	Teacher Publication Ratio			Teacher Research Student Ratio
			Books	Articles	Total	
GNDU	42	390	23 (16.1:1)	367 (1:0.9)	390 (1:1)	72 (5.4:1)
Panjab University	43	789	28 (28.1:1)	655 (1:0.8)	683 (1:0.86)	149 (5.2:1)
Punjabi University	45	433	19.2:1	1:1.2	-	-

Source: compiled from the Annual Reports of these Universities.

Table 3.3: Ratio of Journals and Periodicals to Teachers and Departments, and Percentage of Books Utility

Sl. No.	Subject	Panjab University	Punjabi University	G.N.D. University
I	Teacher Ratio	1:0.82	1:1.2	1:1.38
II	Department Ratio	1:13.1	1:11.6	1:15.09
III	Books (%) utility	1.23	0.88	1.19

Table 3.4: Teachers' Research Projects Ratio

Name of the Universities	On Going	Completed
Panjab University	1:0.10	1:0.09
Punjabi University	1:0.12	1:0.12
Guru Nanak Dev University	1:0.19	1:0.11

Table 3.5: Distinction and Awards

Sl. No.	Subject	Panjab University	Punjabi University	G.N.D. University
I.	Patents	18	No Information	No Information

Source : Compiled from the Self Study Reports of NAAC, Panjab University, Punjabi University and Guru Nanak Dev University submitted.

**Table 3.6: Result of UGC Lecturership and JRF Test (December 2003)**

Name of Universities	Lecturership			JRF		
	Appeared	Qualified	Percentage	Appeared	Qualified	Percentage
Panjab University	3815	283	7.41	2217	30	1.35
GND University	1984	166	8.30	1072	21	1.90

Source: compiled from the Annual Reports of these Universities.

**Table 3.7: Rate of Wastage and Dropout**

Subject	Panjab University	Punjabi University	G.N.D. University
Drop-Out Rate (1998-99)	UG:50% PG:45%	-	UG: 7.14 PG: 14.62
Success-Rate in Examinations (1998-99)	UG:50% PG:60%	No Information	UG: 65.46 PG: 85.38

**Table 3.8: Number of working days in the Respective Universities, 2001-02**

University	No. of working days
Panjab University	194
Guru Nanak Dev University	192
Punjabi University	180

Source: as received from the universities

**Table 3.9: Total Grants for Quality Improvement Programmes in 2001-02**

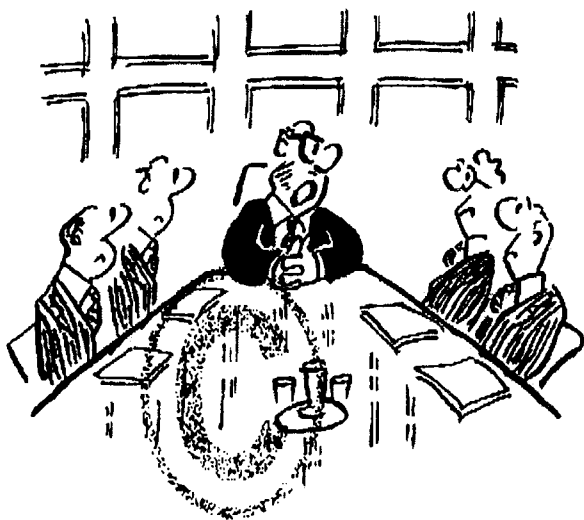
Name of the Universities	Rs. in Lakhs	Percentage
GND University	518.66	47.80
Punjab University	536.34	49.40
Punjabi University	30.26	2.80

Source: compiled from the Annual Reports of these Universities.

# 4

## GOVERNANCE OF THE UNIVERSITIES AND COLLEGES

4.0 Governance of higher education has been rooted in the history of development of universities. When Panjab University, the oldest university in the State, was set up it derived a good part of its system of governance from universities in United Kingdom. When other universities came into existence they also took help of one or the other old models of governance of universities. But basic model of governance remained the same with some variations here and there. In case of the older universities most of the power is vested in Senate, whereas in new universities most of decision-making power is vested in the Executive Committee (EC) or Syndicate. Composition of the decision-making bodies was influenced by the view that ‘university is a corporate body of society’. Hence it should have representation of various groups. The system worked well when the number of universities and colleges was



small. But, with the increase in the number of affiliated colleges and the university departments, the membership of some of these bodies became unmanageable. The system of governance of universities through bodies like Senate, Syndicate, Academic Council and various other committees as existing today seems to have outlived its utility. University Grants Commission (UGC) was also concerned with this issue and, therefore, set up a committee to go into the issues of governance. The committee on Governance & Administration of Universities headed by Prof. Gnanam made several recommendations. A high-powered Committee, Central Advisory Board of Education (CABE), which made several recommendations to reform the governance of universities, further examined these recommendations.

- 4.1 Some of the reforms suggested by the high-powered Committee may be highlighted here:

### **Management of Universities**

- a) In deciding the management pattern of universities, it should be recognized that the academic administration is very different from that in vogue in the governmental or in the Corporate system and it should be based on the principle of participation, decentralization, autonomy and accountability.
- b) The managerial patterns of a University System must necessarily have an inbuilt flexibility to adapt itself quickly to the changing needs of the country and the region it serves and to carry out innovations and experiments. Any effort, therefore, to bring the structure of all universities within the framework of a single pattern of university Act will prove to be an impediment in this process. Legislations, therefore, should, while laying down the broad pattern of university management, leave the details to be framed by each university through Statutes and Ordinances.
- c) Due to statutory and financial restrictions, the present system of university administration is non-conducive to achieve the goals of excellence. The University System, therefore, calls for all-round restructuring to make the constituents of the system more autonomous.
- d) Decentralization of the system is a must for the smooth and effective administration of university affairs. More powers should be delegated to the Deans/Heads so as to make the Faculties/ Departments powerful instruments for the advancement of knowledge. Various committees should be formed at the level of Faculties/Departments with adequate powers of decision-making to deal with matters of admission, research, budget etc., so that fewer items need go to the Academic/Executive Council.

- e) The Departments of a University being its basic operational units, should be enabled to function with freedom and wider academic, administrative and financial powers.
- f) Ministers, the Members of Legislature, or office bearers of political parties should not hold any office in the university system.

### **Aspects of Governance**

4.2 Suggestions given by the Committee on this aspect may be highlighted as follows:

- a) It may be worthwhile to retain the Senate/Court but in a different form and content. It may be re-designated as Societal Advisory Council or Consultative Committee of Society. The University Senate or Court should be a deliberative and consultative body and not a decision -making authority and it should have representation from various sections of society, particularly those related to education and employers/ users of university product.
- b) The Senate may review, from time to time, the broad policies and programmes of the University and may make suggestions for the improvement and development of the university. It should not be the supreme governing authority and should have no powers to make the Statutes or approve the Budget.
- c) The Syndicate/Executive Council should be the principal executive body of the university to coordinate and monitor the functioning of the various subsystems in the university structure. It should be the executive, administrative and financial authority with statute/ordinance making powers on university authority/bodies/ committees/officers, as also administrative and financial matters.
- d) It should not have the power to approve the academic Ordinances/ Regulations passed by the Academic Council except where they have major administrative/financial implications. It should delegate the routine administrative decisions to the statutory officers especially the Vice-Chancellors, Registrars and Deans/ Directors and Heads of Departments.
- e) The title of the Syndicate in the university organizational structure needs to be reviewed. It may be restyled as the Board of Management.

4.3 These reforms basically require to be implemented at the institutional level, more particularly by the respective state governments. However, these have not been implemented by many states including Punjab.

- 4.4 In Punjab, two to three models of governance of the University exist. Panjab University being relatively old one, and located in Union Territory follows a model wherein Senate is the key decision making body, whereas in other universities Executive Committee/Syndicate is the key decision making body. The size and the composition of Senate/Syndicate/ Academic Council do not really help in effective functioning of organizations. A comparison of composition/number of members of various bodies as prevailing on date is given in Tables 1 to 4 in Annexure 4.I.
- 4.5 It may be mentioned that growth and quality of institutions greatly depend on the governance of universities and the way it is organized to respond to present and future needs of growth and development. Nature of composition and size of the committees and frequency of meeting of these committees significantly influence the effectiveness of the institutions. The present composition of various bodies namely, Senate/Syndicate/ Executive Committees, Academic Council leaves much to be desired as these are large in size and have composition of people which could be represented by one or two persons from a category. Senate of Panjab University consists of 91 persons, whereas Punjabi University and Guru Nanak Dev University have 71 and 77 persons, respectively, on this body. The term of Senate members is 4 years in Panjab University, whereas in GNDU and Punjabi University, it is 2 years. There is a possibility of expansion of this number in the latter two universities, as on payment of donation of certain amount or property of that value a person or an organization can become an Ordinary Fellow of the Senate.
- 4.6 In our view, size of the Senate is unwieldy in all the three universities. Power bestowed upon the Senate in the case of Panjab University, practically makes the Syndicate meaningless, as most of the decisions have to be ratified/ approved by the Senate. In fact, executive function of the universities gets seriously affected/ or compromised. Besides, Syndicate in the case of Panjab University can delegate executive power not only to the Vice-Chancellor, but also to a Committee, which may include persons who are not members of the Syndicate. This in fact weakens the position of the Vice-Chancellor. In case of other two universities, syndicate is principal executive authority, and the Senate is only a deliberating body. (See Annexure-4.II for the summary of powers of Senate and Syndicate of Panjab, Punjabi and Guru Nanak Dev Universities). In our views, a restructuring of the governing bodies is required in all the three universities at the earliest. Thus, the powers of Senate, its size as well as composition need to be reviewed.
- 4.7 In the case of Syndicate, though its size is reasonable, yet its composition needs to be reviewed in the case of Panjab University as it is more inward oriented and no outside member nominated by the Chancellor/Visitor is on the Syndicate, whereas in the case of Punjabi University and GND University, there are three nominated members by the Chancellor, who could be from outside the University. There is a provision to elect nominees by the Senate. Elections these days are beset with several problems. Therefore, this provision needs to be reviewed.

4.8 The Committee after a thorough review is making the following recommendations with regard to the size, composition, terms and powers of both these bodies as well as other bodies such as Academic Council, Faculties and Boards of Studies. (see Annexure 4.III for the Proposed Model).

### **Senate**

4.9 Senate is Apex policy making and progress reviewing body. This is also a public face of the university. Therefore, this body by its very nature should not have any Executive Powers. It should be a broad policy and progress reviewing body so as to ensure that university functions according to its pre-determined objectives. This body should be manageable in size and also free from elections. Any size larger than 45-50 becomes very un-manageable particularly when it meets occasionally. We recommend that size of Senate in universities should not exceed 50 persons. It should represent the various interest groups, but be free from political influence. If a group is large, some persons from that group should be represented. Term of Senate should be three years. A recommended composition of the Senate is given in Annexure 4.III and 4.III-A.

### **Syndicate**

4.10 The size of Syndicate/Executive Committee (EC) should not exceed 20 members. It should consist of different stakeholders in the university. This is a key decision-making body and should meet more frequently to take quick decisions on various matters related to management of the university. Suggested composition and tenure of the members is given in Annexures 4.III and 4.III-B.

### **Board of Finance/Finance Committee**

4.11 As far as the Board of Finance/Finance Committee of the University is concerned the Committee feels that it is properly constituted and therefore no modification or reform is suggested. It is, however, mentioned that government representatives on the Committee should come with definite answer to the issues under discussion and their agreement to issues should be taken as government concurrence.

### **Academic Council**

4.12 Academic Council (AC) is the key academic decision-making body. The size of the body was small and manageable when the number of affiliated colleges and University teaching departments was small with a few Professors. With the expansion of university departments and increase in number of affiliated colleges resulting in increase in number of Professors and the Principals, the university Academic Council has become too large a body. Besides being large in size, it has also become slow in implementing academic reforms, as the various stakeholders' interest may not match the needs of the changing time. Therefore, many universities

have not been able to reform their curricula regularly. It is recommended that size of the body should not be more than 40 (see Annexure 4.III-C). Academic Council should deliberate on broad academic policy matters such as:

- (a) semester and credit system
- (b) co-ordination of the graduate academic programmes so as to ensure the standards. Power to frame the curriculum, and appointment of examiners should be vested in the Board of Studies instead of Academic Council.

4.13 Faculty is the coordinating body between the departments of a particular stream which frames the rules / regulations as well as approves the syllabi for various courses. The size of the Faculty should be upto 25 and the major function of the Faculty should be to frame the rules pertaining to various departments. As far as the syllabus is concerned, these should be left to the Board of Studies. See Annexure 4.III-D with regard to composition of Faculty.

#### **Board of Studies**

4.14 Board of studies should be made a statutory body, with the power to change the syllabus and appoint the examiners. This body, besides having representatives from departments, should have representation from industry, service organizations and academicians from other universities. Number of members of Board of Studies should not be more than 15. One third should retire every year after completion of 3-year term. This will maintain the continuity as well as bring fresh persons on the panel (See Annexure 4.III-E).

In our view these reforms will help improving the governance of universities in the state.

4.15 As far as the governance of colleges is concerned, there are two types of colleges:

- (i) government colleges
- (ii) colleges managed by trust/societies

4.16 These are governed by rules of the respective organizations and the rules of universities pertaining to affiliation of colleges, as well as rules of government with regard to use of financial assistance.

4.17 One of the suggestions is that each of the colleges in the State should have Planning and Development Committee with the representation of local persons and their alumni. Main function of this Committee should be to help in mobilization of the funds as well as the development of colleges.



- 4.18 It is further recommended that a good number of colleges in the state have potential to become autonomous and they should be encouraged to become autonomous in due course of time. These measures will help improving the quality and functioning of the colleges.

**Table 1 : Comparison of Composition of Senate in the Universities of Punjab**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Total strength of Senate*	91	71	77
Composition of Ex-officio Fellows	06	09	07
Composition of Ordinary Fellows	85	62**	70**
Terms of Senate	4 Yrs.	2 Yrs.	2 Yrs.

Notes:\* In addition it includes Chancellor, Vice-Chancellor, and Registrar (as Secretary).

In the absence of the Chancellor, the Vice-Chancellor acts as the Chairman of the Senate.

\*\* In addition to these members, nominee of trusts, institutions or any organization donating to the University Rupee One lac or more or transferring property of like value, for lifetime can also become Ordinary Fellow of Punjabi University & GND University.

Source: Acts & Statutes of the Respective Universities.

**Table 2: Comparison of Number of Members in Syndicate in Universities of Punjab**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Syndicate*	17	20	18

Note: \* In addition, it includes Vice-Chancellor and Registrar (as Secretary).

Source: Acts & Statutes of the Respective Universities

**Table 3: Comparison of Number of Members in Board of Finance / Finance Committees in Universities of Punjab**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Board of Finance/ Finance Committee	09*	09	07

Note:\* It also includes nominees from the Govt. of India, Govt. of Punjab and the UT Administration of Chandigarh and Registrar (as Secretary).

Source: Acts & Statutes of the Respective Universities.

**Table 4: Comparison of Number of Members in Academic Council in Universities of Punjab**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Academic Council	55*	47**	44***
Composition of Ex-officio Fellows	12	15	17

Note:\* The Deans of Faculties of Arts, Languages, Science, Business Management & Commerce, Education and Design & Fine Arts are also part of the Academic Council.

In addition, Professors of all departments in these Faculties are also members of the Academic Council. The Principals/Directors of such Arts/Science colleges and University Regional Centres which undertake teaching upto Master's level in 2 or 3 subjects also are part of the Academic Council.

With the increase in number of Professors in the University departments, the present strength of the Academic Council has gone well beyond 200 making it an virtually ineffective body.

\*\* In addition to 47, it includes:

- (i) Heads of University Teaching/Research Departments.
- (ii) One Professor from each of the University Teaching Departments.
- (iii) Principals of Colleges having Post Graduate classes.
- (iv) Principals of Colleges having Hons. Courses in three or more subjects.
- (v) One teacher from each college having 60 or more teachers with 10 years experience.

\*\*\* In addition to 44, it includes:

- (i) Heads of University Departments of Studies.
- (ii) Principals of Colleges having P.G. Classes.
- (iii) Principals of Colleges having Hons. Courses in three or more subjects.

Source: Acts & Statutes of the Respective Universities.

Annexure 4.II

**Summary of Powers of Senate & Syndicate of Panjab University,  
Punjabi University & Guru Nanak Dev University**

Name of University	Powers of the Senate	Powers of Syndicate	Remarks
Panjab University	The Senate of the Panjab University shall have the entire management of, and superintendence over the affairs, concerns and property of the University and shall provide for that management, and exercise that superintendence in accordance with the statutes, rules and regulations for the time being in force.  Ref. Sec. 11(2) P.U.Cal.Vol.I (2000) P.4	The Panjab University Syndicate is the Executive Government of the University, which may delegate any of its executive functions to the Vice-Chancellor or to the sub-committees appointed from amongst the members of the Syndicate or to a Committee appointed by it, which may include persons who are not members of the Syndicate, or to any other authority prescribed by regulations.  Ref. Sec.20 (1) & 20 (4), P.U.Cal.Vol. I (2000) P.8-9	Note: The Dean of University Instruction which has a role/authority similar to Dean Academic Affairs of the Punjabi University and the GNDU, and is not a member of the Syndicate because the Panjab University Act does not provide for it. Similarly, unlike the Punjabi University and the GNDU many other important functionaries such as Deans Students' Welfare and even Deans of various faculties are not eligible to be the ex-officio members of the Syndicate and Senate.

Name of the University	Powers of the Senate	Powers of Syndicate
Punjabi University & GND University	1. To review, from time to time, the broad policies and programmes of the University and to suggest measures for the improvement and development of the University.	The Punjabi University & GNDU Syndicate shall be principal executive of the University and shall have the management and administration of revenue and property of the University and be responsible for the conduct of all administrative affairs of the University not otherwise provided for.
	2. To consider and pass resolutions on the annual report and the annual accounts of the University and the audit report thereon;	
	3. To advise the Chancellor in respect of any matter which may be referred to it for advice; and	
	4. To perform such other duties and exercise such other functions as may be assigned to it by this Act or the Statutes or by the Chancellor.	

Annexure 4.III

**Summary of the Proposed Model of Senate, Syndicate, Academic Council,  
Faculties and Board of Studies**

**Composition of Senate**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Senate	46	44	42
Chancellor	1	1	1
Vice-Chancellor	1	1	1
Composition of Ex-officio Fellows	09	08	07
Composition of Ordinary Fellows	34	33*	32*
Registrar**	1	1	1
Term of Senate	3 Years	3 Years	3 Years

\* The persons who donate to the University Rs.25 lacs or more or transfer property of the like value will also be considered as Ordinary Fellow for life time.

\*\* Member Secretary (without voting right).

Note: In the absence of the Chancellor the Vice-Chancellor acts as the Chairman of the Senate.

**Composition of Syndicate**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Syndicate	18*	18*	17*
Terms of Syndicate	1 Year	1 Year	1 Year

Note:\* The number includes Vice-Chancellor as Chairman (with casting vote) and Registrar as Member-Secretary (without voting right).

**Composition of Academic Council**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Academic Council	35-40	35-40	35-40
Term	2 years	2 years	2 years

**Composition of Faculties and Boards of Studies**

Categories	Name of the Universities		
	Panjab	Punjabi	Guru Nanak Dev
Composition of Faculties	25	25	25
Composition of Board of Studies	15	15	15
Term	3 years	3 years	3 years

Annexure 4.III-A

**Details of the Proposed Model for Senate for Three Universities viz.  
Panjab University, Chandigarh; Punjabi University, Patiala and  
Guru Nanak Dev University, Amritsar**

<b>Senate</b>			
	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
	<b>Composition of Ex-officio fellows.</b>	<b>Composition of Ex-officio fellows</b>	<b>Composition of Ex-officio fellows</b>
1	Chief Minister of Punjab or his nominee not below the rank of Secretary.	Chief Minister of Punjab or his nominee not below the rank of Secretary	Chief Minister of Punjab or his nominee not below the rank of Secretary.
2	Minister of Higher Education, Punjab.	Minister of Higher Education, Punjab.	Minister of Higher Education, Punjab.
3	Chief Justice Punjab & Haryana High Court or his nominee not below the rank of Advocate General	Chief Justice Punjab & Haryana High Court or his nominee not below the rank of Advocate General	Chief Justice Punjab & Haryana High Court Or his nominee not below the rank of Advocate General
4	Advisor to Administrator, U.T.	---	---
5	Secretary, Higher Education, Punjab.	Secretary, Higher Education, Punjab.	Secretary, Higher Education, Punjab.
6	D.P.I.Colleges, Punjab.	D. P. I. Colleges, Punjab	D. P. I. Colleges, Punjab.
7	D.P.I.Colleges,U.T.,Chandigarh	--	--
8	Dean University Instruction	Dean, Academic Affairs	Dean, Academic Affairs
9	Dean, College Dev. Council.	Dean, College Development Council	Dean, College Development Council
10	--	Director, Languages Department	--

contd....

	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
	<b>Ordinary Fellows</b>	<b>Ordinary Fellows</b>	<b>Ordinary fellows</b>
1	Deans of Faculties, by rotation According to seniority <b>04</b>	Deans of Faculties, by rotation according to seniority <b>03</b>	Deans of Faculties by rotation according to seniority. <b>03</b>
2	Professors of University Teaching Depts., who are not Deans, by rotation according to seniority <b>03</b>	Professors of University Teaching Departments of who are not Deans, by rotation according to seniority. <b>03</b>	Professors of University Departments of studies who are not Deans, by rotation according to seniority. <b>03</b>
3	Reader & Lecturers of University Teaching Departments with at least five years post-graduate teaching experience, on rotation according to seniority <b>03</b>	One Reader and one Lecturer of University Teaching Departments with at least five years postgraduate teaching experience, by rotation, according to seniority. <b>02</b>	One Reader and one Lecturer of University Teaching Departments with at least five years post-graduate teaching experience, by rotation, according to seniority <b>02</b>
4	Principals of Technical & professional colleges (one from Medical College and one from Engg. Colleges) <b>02</b>	--	--
5	Principals of affiliated Arts / Science Colleges (one from B. Ed. college/s) <b>04</b>	Principals of colleges affiliated to the University of whom one shall be Principal of Govt. Colleges, and from B.Ed. College by rotation according to seniority. <b>04</b>	Principals of colleges affiliated to the University of whom one shall be Principal of Govt. Colleges, and from B.Ed. College by rotation according to seniority. <b>04</b>
6	Professors, Readers, Sr. Lecturers & Lecturers of affiliated Colleges and professional colleges. (one from the Training College/s, and one from Govt. Colleges) <b>04</b>	Teachers having a minimum experience of seven years in teaching from each college having sixty or more teachers on its staff and admitted to the privileges of the University, by rotation, according to age, beginning with the youngest. <b>04</b>	Teachers, having a minimum experience of seven years in teaching from each college having sixty or more teachers on its staff and admitted to the privileges of the University, by rotation, according to age, beginning with the youngest. <b>04</b>

contd.....

	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
7	---	Nominee of each Trust/ Institution / Corporation /Individual donating to the University 25 lacs rupees or more or transferring property of like value, for life time. <b>01</b>	Nominee of each Trust / Institution / Corporation/ individual donating to the University not less than 25 lacs rupees or more transferring property of like value, for life time. <b>01</b>
8	Persons nominated by the Chancellor for their distinguished work in education or in any other sphere of literary or social activity. <b>06</b>	Nominated by the Chancellor for their distinguished work in education or in any other sphere of literary or social activity <b>06</b>	Nominated by the Chancellor for their distinguished work in education or in any other sphere of literary or social activity. <b>06</b>
9	Eminent alumni who have excelled in different fields to be nominated by the Chancellor <b>03</b>	Eminent alumni who have excelled in different fields to be nominated by the Chancellor <b>03</b>	Eminent alumni who have excelled in different fields to be nominated by the Chancellor <b>03</b>
10	Three students nominated by the State Government out of whom one shall be from amongst women, one from amongst members of Scheduled Castes; as have been or are notified by the State Government and one on the basis of academic record. <b>03</b>	Three students nominated by the State Government out of whom one shall be from amongst women, one from amongst members of Scheduled Castes, as have been or are notified by the State Government and one on the basis of academic record. <b>03</b>	Three students nominated by the State Government out of whom one shall be from amongst women, one from amongst members of Scheduled Castes, as have been or are notified by the State Government and one on the basis of academic record. <b>03</b>
11	One person from the University Teaching Departments with the emerging areas /innovative programmes to be nominated by the Vice-Chancellor. <b>01</b>	One person from the University Teaching Departments with the emerging areas/innovative programmes to be nominated by the Vice-Chancellor. <b>01</b>	One person from the University Teaching Departments with the emerging areas/ innovative programmes to be nominated by the Vice-Chancellor. <b>01</b>

*contd.....*



	Panjab University	Punjabi University	Guru Nanak Dev University
12	----	<p>One person from amongst Officers, who are in the grade not lower than grade of Lecturer, of the following departments by rotation according to seniority:</p> <ul style="list-style-type: none"> <li>i) Department of Development of Punjabi Language;</li> <li>ii) Linguistic Department</li> <li>iii) Department of Religious Studies</li> <li>iv) Department of Literary Studies;</li> <li>v) Department of Punjab Historical Studies.</li> </ul> <p style="text-align: right;"><b>01</b></p>	---
13	---	<p>One persons to be nominated by the State Government from amongst ex-soldiers not below the rank of a Commissioned officer.</p> <p style="text-align: right;"><b>01</b></p>	<p>One persons to be nominated by the State Government from amongst ex-soldiers not below the rank of a Commissioned officer.</p> <p style="text-align: right;"><b>01</b></p>
14	<p>Non-teaching</p> <p style="text-align: right;"><b>01</b></p> <p>Employees' representative</p>	<p>Non- teaching</p> <p style="text-align: right;"><b>01</b></p> <p>Employees' representative</p>	<p>Non-teaching</p> <p style="text-align: right;"><b>01</b></p> <p>Employees' representative</p>
15	Registrar (Member Secretary) (without voting right)	Registrar (Member Secretary) (without voting right)	Registrar (Member Secretary) (without voting right)
	<p><b>Term of the Senate:</b></p> <p style="text-align: right;"><b>3 years.</b></p>	<p><b>Term of the Senate:</b></p> <p style="text-align: right;"><b>3 years.</b></p>	<p><b>Term of the Senate:</b></p> <p style="text-align: right;"><b>3 years.</b></p>

Annexure 4.III-B

## Details of the Proposed Model of the Syndicate for the Three Universities

## Syndicate

	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
	The Syndicate shall consist of -	The Syndicate shall consist of -	The Syndicate shall consist of -
1	Vice-Chancellor, Chairman	Vice-Chancellor, Chairman	Vice-Chancellor, Chairman
2	Secretary, Higher Education, Punjab (Ex-officio).	Secretary, Higher Education Department Punjab.(Ex-officio).	Secretary, Higher Education Punjab (Ex-officio)
3	Director Public Instruction, (Colleges) Punjab (Ex-officio)	Director Public Instruction (Colleges), Punjab. ( Ex-officio)	Director Public Instruction (Colleges) Punjab, (Ex-officio)
4	Director Public Instruction (Colleges), U.T. ( Ex-officio)	----	---
5	Dean University Instruction (Ex-officio)	Dean, Academic Affairs (Ex-officio)	Dean, Academic Affairs (Ex-officio)
6	Dean College Development Council (Ex-officio)	Dean College Development Council (Ex-officio)	Dean College Development Council (Ex-officio)
7	--	Director, Languages Department, Punjab (Ex-officio)	---
8	Persons from amongst Deans of Faculties who are members of the Senate, by rotation, according to seniority. <b>02</b>	Persons from amongst Deans of Faculties who are members of the Senate, by rotation, according to seniority. <b>02</b>	Persons from amongst Deans of faculties who are members of the Senate, by rotation, according to seniority. <b>02</b>
9	Persons from amongst Heads of Departments, other than Deans of Faculties, who are members of the Senate, by rotation according to Seniority. <b>02</b>	Persons from amongst Heads of Departments, other than Deans of Faculties, who are members of the Senate, by rotation according to Seniority. <b>02</b>	Persons from amongst Heads of Departments, other than Deans who are members of the Senate, by rotation, according to seniority. <b>02</b>
10	Persons from amongst principals of colleges other than Deans of Faculties who are members of the Senate, by rotation, according to seniority, of whom at least one shall be Principal of Government College. <b>02</b>	Persons from amongst principals of colleges other than Deans of Faculties who are members of the Senate, by rotation, according to seniority, of whom at least one shall be Principal of Government College. <b>02</b>	Persons from amongst principals of colleges other than Deans of Faculties who are members of the Senate, by rotation, according to seniority, of whom at least one shall be Principal of Government College. <b>02</b>

contd.....

11	Persons nominated by the Vice-Chancellor, <b>two</b> from amongst the eminent industrialists/agriculturist etc. and <b>one</b> from the legal profession.  <b>03</b>	Persons nominated by the Chancellor on the advice of the State Government, <b>one</b> should be eminent academician and <b>one</b> should be industrialist/agriculturist and <b>one</b> should be from legal profession.  <b>03</b>	Persons nominated by the Chancellor on the advice of the Government out of which <b>one</b> should be academician and <b>one</b> should be eminent industrialist /agriculturist and <b>one</b> should be from legal profession.  <b>03</b>
12	Person from the University Teaching Depts. dealing with the emerging areas /innovative programmes to be nominated by the VC.  <b>01</b>	Person from the University Teaching Depts. dealing with the emerging areas/innovative programmes to be nominated by the VC.  <b>01</b>	Person from the teaching depts. dealing with the emerging areas / innovative programmes to be nominated by the Vice-Chancellor.  <b>01</b>
13	Person from the alumni nominees of the Chancellor to be nominated by the Vice-Chancellor.  <b>01</b>	Person from the alumni nominees of the Chancellor to be nominated by the Vice-Chancellor.  <b>01</b>	Person from the alumni nominees of the Chancellor to be nominated by the Vice-Chancellor.  <b>01</b>

Annexure 4.III-C

**Details of the Proposed Model of Academic Council for Three Universities**

	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
	The Academic Council would consist of the following:	The Academic Council would consist of the following:	The Academic Council would consist of the following:
1	Vice-Chancellor (Chairman)	Vice- Chancellor (Chairman)	Vice- Chancellor (Chairman)
2	Director Public Instruction (Colleges) Punjab	Director Public Instruction (Colleges) Punjab	Director Public Instruction (Colleges) Punjab
3	Director Public Instruction (Colleges) U.T.	--	--
4	Dean University Instruction	--	--
5	Deans of Faculties <b>11</b>	Deans of Faculties <b>11</b>	Deans of Faculties <b>11</b>
6	Administrative Deans: Dean College Development Council Dean Students Welfare <b>3-4</b>	Administrative Deans Dean Research, Dean Academics, Dean College Development Council Dean Students Welfare <b>3-4</b>	Administrative Deans: Dean Academic Affairs Dean College Development Council Dean Students Welfare <b>3-4</b>
7	Professors* <b>4</b>	Professors* <b>4</b>	Professors* <b>4</b>
8	Principals* <b>4</b>	Principals* <b>4</b>	Principals* <b>4</b>
9	Head, Distance Education <b>1</b>	Head, Distance Education <b>1</b>	Head, Distance Education <b>1</b>
10	Nominations by the vice-Chancellor from emerging innovative/Research Departments. <b>2</b>	Nominations by Vice-chancellor from Emerging/ Innovative/ Research Departments <b>2</b>	Nominations by Vice-chancellor from Emerging/ Innovative/ Research Departments <b>2</b>
11	Registrar – Member Secy. <b>1</b>	Registrar – Member Secy. <b>1</b>	Registrar – Member Secy. <b>1</b>
12	In-charge University Library <b>1</b>	In-charge University Library <b>1</b>	In-charge, University Library <b>1</b>
13	Controllor of Examinations	Controller of Examinations	Controller of Examinations
14	Eminent Outside Experts <b>4</b>	Eminent Outside Experts <b>4</b>	Eminent Outside Experts <b>4</b>
	<b>Total = 34 to 35</b>	<b>Total = 34 to 35</b>	<b>Total = 34 to 35</b>

Note: The number may vary depending upon number of faculties.

\*= To be nominated by the Vice-Chancellor.

## Annexure 4.III-D

## Details of the Proposed Model for the Faculties in the Three Universities

<b>Panjab University FACULTIES</b>	<b>Punjabi University FACULTIES</b>	<b>Guru Nanak Dev University FACULTIES</b>
The Faculties would consist of the following:	The Faculties would consist of the following:	The Faculties would consist of the following:
Dean (Out of Professors only by seniority by rotation)	Dean (Out of Professors only by seniority by rotation)	Dean (Out of Professors only by seniority by rotation)
Chairpersons of all the Departments.	Chairpersons of all the Departments.	Chairpersons of all the Departments.
Experts ( by rotation; not more than one from any single discipline) (4)	Experts ( by rotation; not more than one from any single discipline) (4)	Experts ( by rotation; not more than one from any single discipline) (4)
Principals to be nominated by the Vice-Chancellor. (2)	Principals to be nominated by the Vice-Chancellor. (2)	Principals to be nominated by the Vice-Chancellor. (2)
Professors by seniority not more than one from any department. (4)	Professors by seniority not more than one from any department. (4)	Professors by seniority not more than one from any department. (4)
<b>Total = upto 25</b>	<b>Total = upto 25</b>	<b>Total = upto 25</b>

Annexure 4.III-E

**Details of the Proposed Model for the Boards of Studies in Three Universities**

	<b>Panjab University</b>	<b>Punjabi University</b>	<b>Guru Nanak Dev University</b>
	<b>Board of Studies</b>	<b>Board of Studies</b>	<b>Board of Studies</b>
1	Chairman of the Department  Convener	Chairman of the Department  Convener	Chairman of the Department  Convener
2	Teachers from the Dept. by rotation up to (7)	Teachers from the Deptts. by rotation up to (7)	Teachers from the Deptts. by rotation up to (7)
3	Outside experts to be nominated by the Vice-Chancellor (5)*	Outside experts to be nominated by the Vice-Chancellor (5)*	Outside experts to be nominated by the Vice-Chancellor (5)*
4	Teachers from colleges by rotation (3) <b>Total = 15;</b>	Teachers from colleges by rotation (3) <b>Total = 15</b>	Teachers from colleges by rotation (3) <b>Total = 15</b>
	*Will include one from those who have been associated with UGC curriculum Development and one from professional Associations	*Will include one from those who have been associated with UGC curriculum Development and one from professional Associations	*Will include one from those who have been associated with UGC curriculum Development and one from professional Associations
	<b>1/3 of the members to retire every year</b>	<b>1/3 of the members to retire every year.</b>	<b>1/3 of the members to retire every year.</b>

# 5

## FINANCING OF HIGHER EDUCATION



### Allocation of Funds : Policy Aspect

- 5.0 For the past few years the policy of allocation of funds on education for developing human capability base has been somewhat confused. This is not specific merely to the State of Punjab. This scenario is prevailing throughout the country. There was a time when education was viewed as an important investment for future of the nation. Hence both Central Government and the State Governments accorded priority to education and allocated a substantial part of their budget to education including higher education, which in turn paid dividend to the nation in the form of quality human resources in various fields of knowledge. Unlike many other developing countries of the world, our country never faced the shortage of knowledgeable human resources. It also provided quality human resources to various parts of the world. It all happened with the public support of education system including that of higher

education and R & D. Since 1995, as part of the condition of IMF loan, governments were advised to cut the investment in higher education. This sector, which produces Engineers, Doctors, Managers, Scientists, Social Scientists, Professional Researchers and Teachers for the education system, was also viewed as a non-merit good. This was not only illogical but also mischievous, as no country has progressed without higher education. This view of reduction in public investment influenced many persons working in Central and State Governments. Hence, every effort by the persons in government is directed to reduction in investment in higher education in the nation. A similar approach has been adopted within the nation in a good number of states by way of :

- (i) some sort of a ban on creation of new posts for teachers;
- (ii) freezing of appointments on the vacant positions; and
- (iii) reduction of the budgetary support to higher education by a certain percentage every year.

5.1 The policy of reducing budgetary support is being vigorously pursued by Ministry of Finance with the Department of Education, of course, through the Secretaries of Education. Agenda is to reduce the budgetary support and mobilize funds from students – who happen to be the first level beneficiary, even though benefit to society is more than that to the individual. It may not be out of place to mention that this policy is not only detrimental to human resource development in the knowledge society but it is also opposite to what developed nations are pursuing, even though they have much higher levels of development in human resources. These countries are investing more in human resources than what they were doing in the past.

5.2 Here we wish to make distinction between scarcity of resources and short-sighted policy. Scarcity of resources could be countered through mobilization of funds from various sources and total investment on education can be enhanced. Due to short-sighted policy, if investment on education is reduced, development of human resources is cramped and the nation is put at risk. Whereas the Committee appreciates the problem of scarcity of resources and encourages mobilizing funds from several sources, but serious questions arise about the policy of reduction of investment in higher education. This premise is valid both for the country in general and the state of Punjab in particular.

### **Policy and Practice of Allocation of Funds**

5.3 There is no announced policy of investment in education in the state. This is particularly so for higher education. The practice as followed by the Punjab State reveals that during the last few years allocation of funds has declined, which shows mismatch between the objectives of development of education and the allocation of funds to it. Not only this, the policy has been: (a) not to encourage innovations through state funds and, (b) not to fund the expansion of higher education. Both these aspects are left to private initiative. As a result, private aided colleges did not get funds for the staff for increased enrollment since early 1980s. This also holds true for universities and government colleges.



**Allocation of Funds: Inter-State Comparison**

- 5.4 The proportion of the budget allocation for education in Punjab in the year 1998-99 was 19.99 per cent of total expenditure on revenue account, which is lower than that of Rajasthan (23.69 per cent), Tamil Nadu (21.43 per cent) and Himachal Pradesh (20.43 per cent).
- 5.5 The revised budget in 1999-2000 and the budget estimates in 2000-01 indicate that allocation to education in Punjab has further declined to 16.93 and 15.78 per cent, respectively. Though there is a decline in almost all the states; decline has been very high in the state of Punjab (see Table 5.1).
- 5.6 In higher education also, there is a decline in total expenditure in Punjab, which accounted for 9.75 per cent only in 1998-99. For all States, the average is 10.15 per cent. It slightly increased in the financial year of 1999-2000 i.e., 11.17 per cent for higher education in Punjab. In the budgeted estimates of Punjab for the year 2000-2001, it declined to 9.41 per cent whereas average for all States rose to 13.14 per cent (see Table 5.2).
- 5.7 There is a vast gap between the approved budget and actual expenditure in almost every year of the 9<sup>th</sup> Five Year Plan. Actual expenditure is almost less than 1/4<sup>th</sup> of the approved expenditure (see Graph 5.1). One has to examine : (a) whether it is because of non-release of funds by Ministry of Finance for education or (b) because of procedural or (c) any other delays. This vast gap indicates inefficient management of planned funds. This has adversely affected the development of higher education in the State.
- 5.8 For education as a whole, budgetary allocation has increased by 6.6 per cent from the previous year. But when it comes to higher education, allocation of funds has declined. Against the actual expenditure of 218.54 crore (non-plan) in 2000-2001, for the year 2001-2002 it is Rs.173.79 crore only, that is less than the previous year (Table 5.3).
- 5.9 The urgent action, therefore, is to bring the budget allocation for education at least to the level of 22 per cent of total budget of the state.
- 5.10 The development policy for higher education does not seem to be clear. The allocation of plan funds during 2000-2001 for higher education was only Rs.2.51 crore and actual expenditure was only Rs.1.17 crore. This amount further dipped to merely Rs.0.67 crore in 2001-2002 (Table 5.3).
- 5.11 It may be pointed out that many states allocate plan funds to the tune of Rs.5 to 15 crore depending on the requirement of higher education and take advantage of Central matching grant schemes. However, Punjab is not able to take advantage of several central schemes in higher education owing to the poor allocation of plan funds.
- 5.12 From the report of the Eleventh Finance Commission 2000-05, it may be further mentioned that average per capita GSDP for the period 1994-95 to 1996-97 in

Punjab is higher i.e. Rs.18,568/- as compared to only Rs.10,377/- for Rajasthan and Rs.13,926/- for Tamil Nadu, yet the allocation of funds to education is much less as compared to these states (Table 5.4).

- 5.13 The development of biotechnology and agro-based industries, agriculture export promotion, agricultural research, information technology and strengthening of the small and medium enterprises are the basic priorities of the state of Punjab. These would require quality human resources. Unless higher education is supported, the development of these sectors will be adversely affected. Therefore, there is a case for re-fixing the priorities in allocation of funds than what was done in the past.

#### **Per Student Unit Cost: Universities**

- 5.14 Financial data pertaining to three universities namely, Panjab University, Chandigarh, Punjabi University, Patiala and Guru Nanak Dev University, Amritsar were collected for the year 1999-2000 to find out the sources of income and per student expenditure incurred by these universities. The data for the year 1999-2000 reveals that nearly Rs.100 thousand per student per annum is spent by Guru Nanak Dev University (GNDU). In Panjab University and Punjabi University, the amount spent is slightly less than that of GNDU. Amount spent by Guru Nanak Dev University was Rs.99.84 thousand (Table 5.7) and by Panjab University, it was Rs.99.77 thousand (Table 5.5) and that by Punjabi University, it was Rs. 92.95 thousand (Table 5.6). Of this amount, cost of teaching per student was Rs.40.40, Rs.56.67 and Rs.58.06 thousand for Guru Nanak Dev University, Punjabi University and Panjab University, respectively. Data on cost of teaching in Panjab University also includes some of the non-teaching costs. In this as well as in Punjabi University, data are not separately available for salaries of teaching and non-teaching staff (see Tables 5.5 and 5.6). The latest data of unit cost in these universities for the year 2001-2002 indicates that, compared to 1999-2000, per student cost has gone up by 18.67% in Panjab University, by 42.91% in Punjabi University and by 30.64% in Guru Nanak Dev University. Taking these universities together the cost per student has gone up by nearly 30% (see Appendix 5.I, 5.II and 5.III).

#### **Students' Contribution**

- 5.15 Of the total per student cost, contribution by students is higher in Guru Nanak Dev University and Punjabi University, which accounts for over 20%\* of the cost, but the contribution by the students of Panjab University is relatively very less, i.e. less than 2% (see Table 5.10). Keeping in view the recommendations made by the Punnaya Committee submitted to UGC on the aspects of contribution by the students, Panjab University has to mobilize more funds, whereas Guru Nanak Dev University and Punjabi University are exceeding the

---

\*High contribution by the students in Guru Nanak Dev University and Punjabi University is partly because of the fact that a substantial amount of fee charged from NRI students, compared to domestic students, has been included in fee charged by all the students. Since the separate figures for NRI Fee are not available, therefore, it is very difficult to work out separately the contribution by the domestic students.

recommendation of 20% of the cost as suggested by the Punnaya Committee. No further burden can be put on the students of these two universities.

### Per student Unit Cost: Colleges

5.16 The unit cost per student for under-graduate education as on 2000-2001 ranged from Rs.5,225 to Rs.14,552, the highest being in Government colleges in rural and semi-urban areas followed by the Government colleges in urban areas (see Table 5.8). Per student unit cost for Government colleges in urban areas was Rs.12,903, whereas per unit cost per student in private aided (urban areas) colleges was Rs.10,329. The lowest cost was in private unaided colleges (urban and semi-urban areas), which worked out to only Rs.5,225 per student. This could be owing to low salaries and appointment of staff on an ad-hoc basis. Of the revenue cost, the contribution by students was 8.67 per cent in government colleges (urban), 4.56 per cent in (rural & semi-urban) government colleges. For private aided urban colleges, contribution of students was significant. It accounted for 38.63 per cent, which is higher than what was recommended by Punnaya Committee. Whereas in private unaided colleges, students contributed slightly more than the unit cost i.e., 106.43 per cent. Though the sample is relatively small, therefore, it cannot be generalized, yet the variety and quality of data obtained from institutions from different locations and management reveal a fair picture of unit cost in colleges. Even with the suggested increase in allocation of funds on education by the state, funds will not be adequate to meet the challenges of development. Hence, more funds would need to be mobilized by the universities and colleges.

### Funds

5.17 In the government colleges, fees from students account for a very small proportion of the total cost. The quality of education in some of these colleges is relatively poor. In the case of private aided colleges, other than the tuition fees, nearly 60 percent of the receipts comes from 'other funds', and both tuition fee and funds constitute nearly half of the total cost per student. In Government colleges, 'other funds' account for only 14 per cent of the total receipts. Fees and funds constitute nearly 6 per cent of the total cost. There is a lot of scope for increasing the receipts from 'other funds' in the case of the Government colleges. We suggest that it can be raised upto Rs.2,000/- from Rs. 500/- per student per annum approximately. We, therefore, suggest that:

- (a) Principals may be authorized to enhance the receipt of funds, maximum upto Rs.2,000/- per annum per student. This will account for nearly 20 percent of the total cost per student. On the pattern of Parents Teacher Association (PTA) funds, the principals may be authorized to raise funds under each of the heads according to the economic conditions of the area. In rural areas it may be less and in the industrial towns, it may be more. This would enable them to have some resources for improvement of library, laboratory infrastructure and maintenance of the buildings.

- (b) As far as the private-aided colleges are concerned, almost half (i.e. 47 percent) of the unit cost is met from funds and fees charged from the students in urban areas and 15-18 percent in semi-urban and rural areas. This is partly because of the fact that since mid 1980's, additional posts have not been given whereas additional teachers have been appointed by the colleges to meet the urgent needs of development of higher education in urban areas. This has been done by raising the funds and fees from the students and by introducing self-financing courses. We don't think there is any scope for enhancing the fees significantly in private aided colleges in urban areas. But there can be marginal increase depending on the location of institutions and the nature of the courses. Funds from students in semi-urban and rural areas may also be enhanced on the lines of government colleges. The same holds true for universities in the state. These may also increase receipts from 'other funds' and fees depending on the nature of the courses and the capacity of students to pay.

### **Tuition Fee**

- 5.18 As far as tuition fee is concerned, presently it is very less as it accounts for only 1.8 per cent of the total cost in government colleges. In private aided colleges in urban areas, its share is substantial, i.e., 27 per cent of the total cost. The tuition fee can be enhanced to recover almost 10 per cent of the total cost. Both funds and fee put together will be more than 25 per cent of the total per student cost, which is higher than what has been suggested by Punnaya Committee to the UGC. Tuition fee (which goes to treasury) partly reduces the burden of state exchequer. The treasury again gives it back to education department. To avoid this unnecessary process, we suggest that the enhanced amount may be allowed to be retained by the colleges for implementing programmes of quality of teaching and learning process. This would reduce the demand for funds from the state. Any steep enhancement of tuition fee as was proposed by the Government earlier may not be advisable at this stage. Universities may also enhance the funds and fees in the same manner as suggested above.

### **Grants-in-Aid System**

- 5.19 Under the 95% deficit grant-in-aid scheme, the government covered the posts existing upto 1-11-1977. On 1-11-1981, new posts were sanctioned for the private aided colleges on the basis of the student strength and workload of the teachers. Additional 229 posts of lecturers in the subject of Punjabi were sanctioned for the colleges in 1986. Presently, claim of 95% grant against the above deficit submitted by the colleges has never been fully met after the year 1998-99. Since then the government has not been able to meet the claim of the colleges as committed by the Government of Punjab. It has also been observed that since enrolment in the colleges has increased mainly due to introduction of new courses as computer courses, physiotherapy, bio-technology, bio-informatics etc. and the colleges were required to appoint additional staff for teaching of the students, additional posts required to meet increased strength of students should also be covered under the system of deficit grant. Additionally, the government should convert the surplus posts which hitherto have been

covered under deficit grant scheme of the government into such posts/disciplines which have remained uncovered so far.

5.20 The tuition fee charged from the students in the government colleges has also not been increased since 1981/1986. However, private aided colleges affiliated to three universities of the state are charging the increased fee from the students as recommended by their respective universities. The tuition fee recommended by these universities also varies from university to university. The tuition fee as recommended by the respective universities is higher than the fees recommended by the State Government. The system of financing is, therefore, presenting a very hazy picture, as the fee charged from the students, indeed, varies from college to college.

5.21 The amount reimbursed by the state to private aided colleges is 95% of the deficit. That is worked out as follows:

**0.95 [Expenditure on Salary – (Tuition Fee + Admission Fee + Income from fines)].**

However, the amount of admission and tuition fees is calculated on the basis of increased fee charged by the colleges as per university recommendations, as well as for all the students irrespective of the fact whether the salary of these teachers under the system of deficit grant is provided by the Government or not. However, as stated above, colleges are not being paid amount as per the formula of deficit. In 2002-03, the Government met only upto 60% of the worked out amount as per the formula. This is owing to poor allocation by Ministry of Finance to education. Under the circumstances, colleges are resorting to charging high fees from the students under the head 'teacher welfare fund'. Alternatively, colleges pay less salary to the teachers and make them to sign for the full salary.

5.22 The situation is that on one side the committed expenditure is not being met and on the other, salary of additional teachers appointed on account of increase in enrolments is not covered by the grant-in-aid system. Teachers are, therefore, being paid less than the prescribed salary. The scheme of grant-in-aid seems to have ceased at the level of 1981/1986 as far as the government support is concerned, but the system has been growing thereafter because of the increase in the number of students. Under the circumstances, the scheme of grant-in-aid needs to be reexamined and a rational system of funding of colleges needs to be worked out. In view of the situation, it may be appropriate to review the scheme of deficit grant-in-aid.

5.23 Till this happens, the following steps be taken :

- (a) The state should meet the commitment of 95% for those posts which are covered by it under the grant-in-aid scheme.
- (b) This should be possible as burden on the state has already come down, as the scheme of grants-in-aid has not been extended for all the teachers who were recruited after 1981/1986, in the light of increase in enrolment.

- 5.24 The committee would have liked that the scheme be extended to 2003 in the larger interest of developing higher education in the state. But the financial crunch is making it difficult for the state to support. We suggest that commitment made by the state for the required posts be met and the colleges may be allowed to charge higher tuition fee. Since the tuition fee has not been increased since 1981/1986 and the burden on the state exchequer for these posts has gone up many fold, it may be appropriate to increase the tuition fees to Rs.100 p.m. for aided and government colleges. The state should extend to pay 95% of the deficit for the posts which are not covered so far. The formula for working out the deficit should be based on student teacher ratio or workload norms. It may also be pointed out that salaries of teachers teaching at +2 stage are also being recovered by the colleges under the 95% deficit grant, which in our view should be shifted to school sector.
- 5.25 It has also been observed that presently fees and funds collected from students constitute 6% of unit cost for government colleges and 47% for private colleges. The proportion of the fees and funds collected from the students in private colleges is much higher whereas in government colleges, it is very low.
- 5.26 The Committee, after considering all aspects, is of the view that there is possibility of increase in fees and funds in Government colleges. There is, however, very little scope for increase in funds in the private aided colleges. In order to improve the quality of education in government colleges, the fee and funds may be increased upto 25% of the average cost per student.
- 5.27 The Committee, however, recommends that the state should, through regulatory measures, ensure payment of proper salary, remuneration and other service benefits to the teachers. In no case, teachers should be paid less than the amounts recommended by the University Grants Commission. For the part-time or ad hoc teachers, all those posts which are required to be filled in as per teacher student ratio should also be filled as per government rules and the scheme may be extended to cover all the teachers required as per teacher student norms/work load norms.
- 5.28 This increase in fee will fetch a good proportion of amount which is required to meet the actual deficit. In case the colleges are appointing ad hoc and part-time teachers for any purpose, they should be governed by the scheme recommended by the University Grants Commission for part time teachers.

#### **Funds from Community Sources**

- 5.29 We recommend that a Development Committee may be set up in each of the colleges and universities. This committee may raise funds for the development of the institution from the community. The Committee may consist of eminent persons of the society, namely, educationists, industrialists, agriculturists and government officers. Funds so mobilized may be used for infrastructure development of the institutions. A similar experiment has succeeded in other states and in other countries. Funds so mobilized should be used for development

purposes with the approval of the committee. It may not constitute part of “state exchequer” funds.

5.30 Besides mobilization of funds from students, universities and colleges should develop programmes and schemes of mobilization of funds. Some of the programmes & schemes often used in many parts of the world as mentioned below could be explored :

- Renting out the space.
- Renting out Auditorium for social functions.
- Renting out space after college hours for other academic activities.
- Making library open to public use on the basis of service charges.
- Participation in national/state level survey and research activities.
- Providing counseling and guidance to people.
- Consultancy to developmental agencies.
- Conducting household surveys to identify developmental needs of the community and informing the developmental agencies.
- Short-term courses on self financing basis for the farmers, traders, community people, housewives and youths.
- Printing, publication of courseware and material for studies.
- Formation of Alumni associations and mobilization of funds from them.
- Seeking donations from philanthropists and developing a corpus fund. Also seeking incentive grant from UGC.
- Approaching UGC, DST and other agencies and applying for grants under the various schemes of these agencies
- Holding of cultural and sports events for the benefit of development of colleges.
- Seeking NRI funding for specific developmental needs and building corpus.
- Event management for community and government departments with the help of students.

5.31 These are some of the alternative sources of funding which can be explored by the colleges and universities. Universities have been mobilizing funds from students and colleges through various funds and affiliating charges. Our recommendation is that focus should shift to mobilization of funds through service to community, research support, renting out space, alumni support, NRI

support, event management for the government and community, taking full advantage of various UGC, DST and other Government schemes and finally developing good corpus fund and earning interest income on the same.

- 5.32 We would like to recommend that on the lines of Central Government and UGC schemes, a matching grant of rupee for rupee or an incentive grant to develop the corpus fund may be given to Colleges and Universities. The interest earned from corpus fund would relieve the demand for more funds from the State Government.



**Table 5.1: Percentage of Total Plan and Non-Plan Budget Expenditure on Education**

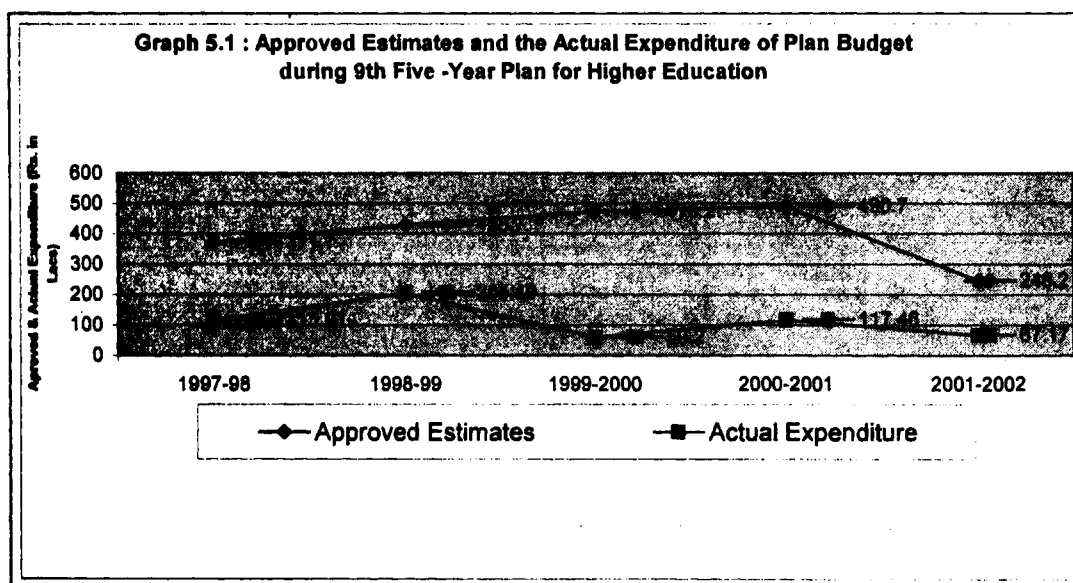
Name of the State	1998-99 (Actual)			1999-2000 (Revised Estimate)			2000-2001 (Budget Estimate)		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
Haryana	19.74	16.72	17.05	18.77	16.46	16.78	10.80	16.81	15.81
Himachal Pradesh	23.31	19.18	20.43	24.15	14.92	17.51	31.10	16.11	19.83
Punjab	36.71	18.63	19.99	17.74	16.80	16.93	19.01	15.32	15.78
Rajasthan	19.25	24.33	23.69	21.80	21.86	21.85	20.86	22.59	22.34
Tamil Nadu	7.02	23.72	21.43	9.17	22.01	20.47	10.06	22.33	21.07
Maharashtra									
<b>All States</b>	<b>13.68</b>	<b>21.29</b>	<b>20.09</b>	<b>13.68</b>	<b>22.22</b>	<b>20.85</b>	<b>12.94</b>	<b>20.38</b>	<b>19.15</b>

Source: *Analysis of Budgeted Expenditure on Education, 1998-99 to 2000-2001*, Ministry of HRD, Department of Secondary and Higher Education, New Delhi, 2001.

**Table 5.2: Percentage of Plan and Non-Plan Expenditure on University and Other Higher Education**

Name of the State	Revenue Account Total Expenditure % of Total Expenditure on Higher Education		
	1998-99 (Actual)	1999-2000 (Revised Estimate)	2000-2001 (Budget Estimate)
Haryana	9.55	13.13	17.07
Himachal Pradesh	6.43	8.22	6.50
Punjab	9.75	11.17	9.41
Rajasthan	7.07	6.95	6.88
Tamil Nadu	7.46	11.83	13.94
Maharashtra	9.51	7.24	15.72
<b>All States</b>	<b>10.15</b>	<b>10.55</b>	<b>13.14</b>
<b>All India</b>	<b>11.94</b>	<b>12.67</b>	<b>14.56</b>

Source: *Analysis of Budgeted Expenditure on Education, 1998-99 to 2000-2001*, Ministry of HRD, Department of Secondary and Higher Education, New Delhi, 2001.



Source : *Budgets for Higher Education*, Punjab Government, 1997-98 to 2001-2002

Table 5.3: Plan and Non-Plan Budget for Higher Education in Punjab

(Rs. In Lacs)

YEAR	PLAN			NON-PLAN			TOTAL		
	A.E	R.E.	EXP.	A.E.	R.E.	EXP.	A.E.	R.E.	EXP.
1997-1998	371.7	162.24	115.91	13130.23	15059.19	13689.00	13501.93	15221.43	13804.91
1998-1999	428.7	333.51	205.49	15675.32	17754.94	16536.16	16104.02	18088.45	16741.65
1999-2000	473.2	393.7	59.2	14932.98	21869.03	21399.07	15406.18	22262.73	21458.27
2000-2001	490.7	251.0	117.46	19516.59	21320.4	21854.10	20007.29	21571.4	21971.56
2001-2002	246.2	237.51	67.17	19934.92	21225.37	17378.54	20181.12	21462.88	17445.71

A.E. – Approved Estimates; R.E. – Revised Estimates; Exp. - Expenditure

Source : Office of D.P.I. (Colleges), Punjab.

Table 5.4: Per Capita GSDP of States Comparable Estimates : New Series

(in Rs.)

States	1994-95	1995-96	1996-97	Average
Rajasthan	9053.00	10068.00	12010.00	10377.00
Tamil Nadu	12171.00	13679.00	15929.00	13926.33
Maharashtra	16109.00	19644.00	21541.00	19098.00
<b>Punjab</b>	<b>16620.00</b>	<b>18177.00</b>	<b>20908.00</b>	<b>18568.33</b>
Goa	21110.00	24569.00	29548.00	25075.67
Bihar	5099.00	5242.00	6245.00	5528.67
U.P.	6748.00	7409.00	8950.00	7702.33
Gujarat	14560.00	16105.00	18330.00	16331.67

Source : Eleventh Finance Commission (2000), "Report of the Eleventh Finance Commission for 2000-2005", Akalanka Publications, Delhi.

Table 5.5: Per Student Cost of Various Heads of Expenditure of Panjab University – Non-Plan, 1999-2000 Actual

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (In Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Depts.	367419	53.79
2	Allied Teaching	-	-
3	Improvement of Education	8247	1.21
4	Research Bulletins	1032	0.15
5	Grant for Development of Punjabi Language	-	-
6	Regional Centers	19845	2.91
	<b>Total</b>	<b>396543</b>	<b>58.06</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	126922	18.58
2	Non Teaching (Included in the teaching staff)		
	<b>Total</b>	<b>126922</b>	<b>18.58</b>
<b>C</b>	<b>Library</b>		
1	Library	-	-
2	A. C. Joshi Library, Chandigarh	24469	3.58
3	Extension Library, Ludhiana	8089	1.18
	<b>Total</b>	<b>32558</b>	<b>4.76</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Centre</b>		
1	University Hostels	11405	1.67
2	Schemes & Stipend	0	0
3	Health Centre	7526	1.10
	<b>Total</b>	<b>18931</b>	<b>2.77</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Depts.	11128	1.63
2	Publication Bureau	3590	0.53
	<b>Total</b>	<b>14718</b>	<b>2.16</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Depts.	44809	6.56
<b>G.</b>	<b>Miscellaneous</b>	<b>46976</b>	<b>6.88</b>
	<b>Total (A-G)</b>	<b>681457</b>	<b>99.77</b>
<b>H</b>	<b>Others</b>		
1	Suspense A/c	0	0
2	Miscellaneous Depts.	0	0
3	Provision for D. A.	0	0
4	Fund Account	N. A.	N. A.
5	Loans & Advances	2300	0.34
	<b>Total</b>	<b>2300</b>	<b>0.34</b>
<b>I</b>	<b>Conduct of Examination</b>	<b>55957</b>	<b>8.19</b>
<b>J</b>	<b>Correspondence Studies</b>	<b>60036</b>	<b>8.79</b>
	<b>Grand Total (A – J)</b>	<b>Rs. 7, 99,750</b>	<b>117.43</b>

Source: Compiled from the Budget of the Panjab university, 1999-2000.

Table 5.6: Per Student Cost of Various Heads of Expenditure of Punjabi University – Non-Plan, 1999-2000 Actual

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (In Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Depts.	1,43,094	50.16
2	Allied Teaching	-	-
3	Improvement of Education	5447	1.91
4	Research Bulletins	-	-
5	Grant for Development of Punjabi Language	13,137	4.60
6	Regional Centers	-	-
	<b>Total</b>	<b>1,61,678</b>	<b>56.67</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	-	-
2	Non Teaching	-	-
	<b>Total</b>	<b>-</b>	<b>-</b>
<b>C</b>	<b>Library</b>		
	<b>Total</b>	<b>19,858</b>	<b>6.96</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Center</b>		
1	University Hostels	6977	2.45
2	Schemes & Stipend	4858	1.70
3	Health Center	5526	1.94
	<b>Total</b>	<b>17361</b>	<b>6.09</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Department	7339	2.57
2	Publication Bureau	-	-
	<b>Total</b>	<b>7339</b>	<b>2.57</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Department	-	-
	<b>Total</b>	<b>-</b>	<b>-</b>
<b>G.</b>	<b>Miscellaneous</b>	<b>58976</b>	<b>20.67</b>
	<b>Total (A-G)</b>	<b>265212</b>	<b>92.95</b>
<b>H</b>	<b>Others</b>		
1	Suspense A/c	0	0
2	Miscellaneous Department	41181	14.43
3	Provision for D. A.	0	0
4	Fund Account	-	-
5	Loans & Advances	-	-
	<b>Total</b>	<b>41181</b>	<b>14.43</b>
<b>I</b>	<b>Conduct of Examination</b>	<b>22376</b>	<b>7.84</b>
<b>J</b>	<b>Correspondence Studies</b>	<b>24320</b>	<b>8.52</b>
<b>Grand Total (A – J)</b>		<b>Rs. 3,53,089</b>	<b>123.75</b>

Source: Compiled from the Budget of the Punjabi University, 1999-2000.

**Table 5.7: Per Student Cost of Various Heads of Expenditure of Guru Nanak Dev University – Non-Plan, 1999-2000 Actual**

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (in Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Department	139424	34.03
2	Allied Teaching	6011	1.47
3	Improvement of Education	2276	0.56
4	Research Bulletins	-	-
5	Grant for Development of Punjabi Language	-	-
6	Regional Centers	17771	4.34
	<b>Total</b>	<b>165482</b>	<b>40.40</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	88874	21.69
2	Non Teaching	12229	2.98
	<b>Total</b>	<b>101103</b>	<b>724.67</b>
<b>C</b>	<b>Library</b>		
	<b>Total</b>	<b>23577</b>	<b>5.75</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Center</b>		
1	University Hostels	1909	0.47
2	Schemes & Stipend	0	0
3	Health Center	6306	1.54
	<b>Total</b>	<b>8215</b>	<b>2.01</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Department	6061	1.48
2	Publication Bureau	-	-
	<b>Total</b>	<b>6061</b>	<b>1.48</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Department	56011	13.67
<b>G</b>	<b>Miscellaneous</b>	<b>48589</b>	<b>11.86</b>
	<b>Total (A-G)</b>	<b>409038</b>	<b>99.84</b>
<b>H</b>	<b>Others</b>		
1	Suspense A/c	122	0.03
2	Miscellaneous Department	0	0
3	Provision for D. A.	0	0
4	Fund Account	0	0
5	Loans & Advances	2146	0.52
	<b>Total</b>	<b>2268</b>	<b>0.55</b>
<b>I</b>	<b>Conduct of Examination</b>	<b>38932</b>	<b>9.50</b>
<b>J</b>	<b>Correspondence Studies</b>	-	-
<b>Grand Total (A-J)</b>		<b>Rs 450238</b>	<b>110.44</b>

Source: Compiled from the Budget of the Guru Nanak Dev University, 1999-2000.

Table 5.8: Unit Cost, Income, Surplus/Deficit in Sample Colleges of Punjab, 2000-2001

Type of College	Total No. of Colleges	Total No. of Student	A	B	D	(B+D)	C	B+D+C	(B+D+C) - A	Contribution by students
			Average Cost Per Student (A)	Average Cost Defrayed by the Students (B)	Average of PTA Fund	Total Average Cost coming from students	Average Grant in Aid paid by the Govt.	Total Average Income per Student	Surplus/ Deficit	
Government (Urban)	12*	22,786	12,903	788	253	1,041	9,899	10,940	-1,963	8.67
Government (Rural & Semi-Urban)	3	3,738	14,552	440	223	663	11,805	12,468	-2,084	4.56
Private Aided (Urban)	16*	30,811	10,329	3,990	--	3,990	04,473	8,463	-1,866	38.63
Private Aided (Rural & Semi-Urban)	3*	1,136	11,725	1,711	--	1,711	6,328	8,039	-3,686	7.73
Unaided (Urban & Semi-Urban)	3	2,047	5,225	5,561	--	5,561	N.A.	5,561	+336	106.43

Source: Compiled from the Data supplied by the Colleges of Punjab, randomly selected.

Note:\*=The Table excludes three colleges given below which are showing extreme trends :

The S.C.D. Govt. College for Boys, Ludhiana (Punjab), which has 2905 students and the 'Total Average Cost' of this college is Rs. 30,806/-, which is much higher than an average trend. The 'Total Average Cost' defrayed by the students is Rs. 604/- only. The Government support per student is Rs. 12,578/- and the fund received through PTA is Rs. 3,616/- per student, which is phenomenally high.

The Ramgarhia College, Phagwara (Punjab) is also excluded from the table. It has an enrolment of 417 students. Its 'Total Average Cost' is Rs. 24,563/-, which is much higher than the general trend. 'Total Average Cost' defrayed by the students of this college is Rs. 3900/-. The Grant in Aid is Rs. 20,416/- per student.

The Shahid Kanshi Ram Memorial College, Bhago Majra, Distt. Ropar, has 123 students but shows the 'Total Average Cost' of Rs. 44,496/- which is much higher than a general trend. The 'Total Average Cost' defrayed by the students of this college is Rs. 1,023/-. The Grant in Aid is Rs. 20,886/- per student.

Table 5.9: Per Student Receipts in Three Universities by Various Sources Non-Plan in 1999-2000

Heads of Receipt		Panjab university		Punjabi University		Guru Nanak Dev University	
A	Grant in Aid	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum
	- From Punjab Govt.	1,64,629	24,100	--	--	2,09,153	51,050
	- Capital Work			--	--	20,036	4,890
	- UGC (Dev. Grants)			--	--	20,020	4,887
	- Central Govt.			--	--	5,801	1,416
	- Govt. of India, Ministry of Social Justice Empowerment			--	--	0	0
	- Union Territory	3,28,000	48,016	--	--	--	--
	- Others	0	0	--	--	5,162	1,260
	<b>Total</b>	<b>4,92,629</b>	<b>72,117</b>	<b>2,88,354</b>	<b>1,01,070</b>	<b>2,60,172</b>	<b>63,503</b>
<b>B.</b>	<b>Fee</b>						
	- Fee of Examination	65,317	680	85,789	1,642	96,957	1,382
	- Registration/Migration/ Certification fee	8,080	84	6,934	133	18,423	263
	- University, Tuition Fee	6,353	930	48,337	16,942	86,121	21,021
	<b>Total</b>	<b>79,750</b>	<b>1,694</b>	<b>1,41,060</b>	<b>18,717</b>	<b>2,01,506</b>	<b>22,666</b>
<b>C.</b>	<b>Others</b>						
	- Regional Center	366	54	--	--	3,393	828
	- Library	203	30	1,235	433	182	44
	- Scholarship	0	0	5,408	1,895	150	37
	- Refund of Unpaid Salaries (un-cashed cheques)	0	0	0	0	252	62
	- University Hostel	167	24	0	0	0	0
	- University	1,341	196	0	0	0	0
	- Publication Bureau	1,125	165	0	0	0	0
	- Research Bulletins & other Publications	3	4	0	0	0	0

Contd...

	- Construction of Buildings	-	-	-	-	-
	- Miscellaneous	1,738	254	39,538	13,858	5,399
	<b>Total</b>	<b>4,943</b>	<b>724</b>	<b>46,181</b>	<b>16,187</b>	<b>6,370</b>
<b>D.</b>	<b>Correspondence Studies</b>					
	<b>Total</b>	<b>23,901</b>	<b>3,499</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>F.</b>	- Receiving of Loans	0	0	99	35	518
	- Deposits of Interests	0	0	581	204	598
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>680</b>	<b>238</b>	<b>1,115</b>
<b>E.</b>	<b>Grand Total</b>	<b>6,16,865</b>	<b>78,034</b>	<b>4,76,275</b>	<b>1,36,212</b>	<b>4,92,342</b>

Source: *Budget Estimates, 2002-03 of Panjab, Punjabi and Guru Nanak Dev Universities, 2002*. The total enrolment figures are taken from University Development in India: Basic Facts and Figures on Institutions of Higher Education, Students Enrolment and Teaching Staff, 1995-96 to 2000-2001, UGC, January 2003.

Note: The per student receipt has been worked out by dividing receipts under various heads by total number of students (excluding enrolments in correspondence courses) in respective universities. However, per student examination fee and receipts on account of registration, migration, certification etc. are arrived by dividing receipts under these heads by total number of students in universities and their affiliated colleges.

**Table 5.10: Per Student Contribution Towards Per Student Cost in Universities (1999-2000)**

Name of the University	Cost Per Student (Rs. In 000) <sup>1</sup>	Contribution per Student <sup>2</sup> (in Rs.)	Per Student Contribution as Percentage of Cost per Student
Panjab University	97.61	1748	1.79
Punjab University	90.38	19150	21.19
Guru Nanak Dev University	98.36	22710	23.09

1. Excluding cost per student on press and publications.

2. Comprising fees, library and hostel charges.



**Per Student Cost of Various Heads of Expenditure of Panjab University –  
Non-Plan, 2001-2002 Actual**

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (In Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Depts. (including Regional Centres)	408139	64.48
2	Allied Teaching		
3	Improvement of Education	7000	1.11
4	Research Bulletins	1018	0.16
5	Grant for Development of Punjabi Language		
6	Regional Centers		
	<b>Total</b>	<b>416175</b>	<b>65.75</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	133139	21.03
2	Non Teaching	(Included in the Teaching Staff)	
	<b>Total</b>	<b>133139</b>	<b>21.03</b>
<b>C</b>	<b>Library</b>		
1	A. C. Joshi Library, Chandigarh	23794	3.76
2	Extension Library, Ludhiana	7492	1.18
	<b>Total</b>	<b>31286</b>	<b>4.94</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Centre</b>		
1	University Hostels	12723	2.01
2	Schemes & Stipend		
3	Health Centre	8428	1.33
	<b>Total</b>	<b>21151</b>	<b>3.34</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Depts.	10918	1.73
2	Publication Bureau	3507	0.55
	<b>Total</b>	<b>14425</b>	<b>2.28</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Depts.	50072	7.91
<b>G.</b>	<b>Miscellaneous</b>	<b>83235</b>	<b>13.15</b>
	<b>Total (A-G)</b>	<b>749483</b>	<b>118.40</b>
<b>H.</b>	<b>Others</b>		
1	Suspense A/c		
2	Miscellaneous Depts.		
3	Provision for D. A.		
4	Fund Account		
5	Loans & Advances	2300	0.36
	<b>Total</b>	<b>2300</b>	<b>0.36</b>
<b>I.</b>	<b>Conduct of Examination</b>	<b>51132</b>	<b>0.51</b>
<b>Grand Total (A – I)</b>		<b>802915</b>	<b>119.28</b>

Source: Compiled from the Budget of the Panjab University, Chandigarh, 2003-2004.

**Per Student Cost of Various Heads of Expenditure of Punjabi University –  
Non-Plan, 2001-2002 Actual**

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (In Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Depts. (including Regional Centres and Research Depts.)	200530	60.79
2	Allied Teaching		
3	Improvement of Education	8338	2.57
4	Research Bulletins		
5	Grant for Development of Punjabi Language	15137	4.59
	<b>Total</b>	<b>224005</b>	<b>67.90</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	95014	28.80
2	Non Teaching		
	<b>Total</b>	<b>95014</b>	<b>28.80</b>
<b>C</b>	<b>Library</b>		
	<b>Total</b>	<b>21950</b>	<b>6.65</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Center (including Building Fund)</b>		
1	University Hostels	22500	6.82
2	Schemes & Stipend	6126	1.86
3	Health Center	5948	1.80
	<b>Total</b>	<b>34574</b>	<b>10.48</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Department	7877	2.39
2	Publication Bureau		
	<b>Total</b>	<b>7877</b>	<b>2.39</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Department		
	<b>Total</b>		
<b>G.</b>	<b>Miscellaneous</b>	<b>52335</b>	<b>15.86</b>
	<b>Total (A-G)</b>	<b>435755</b>	<b>132.09</b>
<b>H</b>	<b>Others</b>		
1	Suspense A/c		
2	Miscellaneous Department	54352	16.47
3	Provision for D. A.		
4	Fund Account		
5	Loans & Advances	6213	1.88
	<b>Total</b>	<b>60565</b>	<b>18.36</b>
<b>I</b>	<b>Conduct of Examination</b>	<b>32621</b>	<b>0.60</b>
<b>Grand Total (A – I)</b>		<b>528941</b>	<b>151.05</b>

Source: Compiled from the Budget of the Punjabi University, Patiala, 2003-2004.

**Per Student Cost of Various Heads of Expenditure of Guru Nanak Dev University – Non-Plan,  
2001-2002 Actual**

S.No.	Heads of Expenditure	Actual Expenditure (In Rs. 000)	Cost Per Student (in Rs. 000)
<b>A</b>	<b>Teaching Cost</b>		
1	University Teaching Department (including Regional Centers)	195721	19.66
2	Allied Teaching	6071	1.54
3	Improvement of Education	8649	2.20
4	Research Bulletins		
5	Grant for Development of Punjabi Language		
	<b>Total</b>	<b>210441</b>	<b>53.40</b>
<b>B</b>	<b>Administrative Cost</b>		
1	Gen Admn. (Including Office Salary)	145606	36.95
2	Non Teaching	60245	15.29
	<b>Total</b>	<b>205851</b>	<b>52.23</b>
<b>C</b>	<b>Library</b>		
	<b>Total</b>	<b>26431</b>	<b>6.71</b>
<b>D</b>	<b>Hostel, Stipend &amp; Health Center</b>		
1	University Hostels	2750	0.70
2	Schemes & Stipend		
3	Health Center	5673	1.44
	<b>Total</b>	<b>8423</b>	<b>2.14</b>
<b>E</b>	<b>Press and Publication</b>		
1	Press Department	7620	1.93
2	Publication Bureau	1142	0.29
	<b>Total</b>	<b>8762</b>	<b>2.22</b>
<b>F</b>	<b>Maintenance and Repairs</b>		
1	Work Department	54100	13.73
<b>G</b>	<b>Miscellaneous</b>		
	<b>Total (A-G)</b>	<b>514008</b>	<b>130.43</b>
<b>H</b>	<b>Others</b>		
1	Suspense A/c	561	0.14
2	Miscellaneous Department		
3	Provision for D. A.		
4	Fund Account		
5	Loans & Advances	2272	0.58
	<b>Total</b>	<b>2833</b>	<b>0.72</b>
<b>I</b>	<b>Conduct of Examination</b>	<b>24141</b>	<b>6.13</b>
<b>Grand Total (A-I)</b>		<b>540982</b>	<b>137.27</b>

Source: Compiled from the Budget of the Guru Nanak Dev University, Amritsar, 2003-2004.

## Appendix 5.IV

## Per Student Receipts in Three Universities by Various Sources Non-Plan in 2001-2002

	Heads of Receipt	Panjab university		Punjabi University		Guru Nanak Dev University	
		Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum
<b>A</b>	<b>Grant in Aid</b>						
	- From Punjab Govt.	1,70,567	26,946	2,54,496	77,143	1,87,982	47,699
	- Capital Work			--	--	--	--
	- UGC (Dev. Grants)			--	--	--	--
	- Central Govt.			1,564	474	--	--
	- Govt. of India, Ministry of Social Justice Empowerment			--	--	--	--
	- Union Territory	2,88,900	45,640	--	--	--	--
	- Others	1,000	158	4,423	1,341	--	--
	<b>Total</b>	<b>4,60,475</b>	<b>72,745</b>	<b>2,60,483</b>	<b>78,958</b>	<b>1,87,982</b>	<b>47,699</b>
<b>B.</b>	<b>Fee</b>						
	- Fee of Examination	1,61,878	1,623	1,26,150	2,324	1,26,461	1623
	- Registration/Migration/ Certification fee	19,114	192	9,565	176	27,116	348
	- University, Tuition Fee	51,264	8,099	71,289	21,609	1,58,799	40,294
	<b>Total</b>	<b>2,32,256</b>	<b>9,914</b>	<b>2,07,004</b>	<b>24,109</b>	<b>3,12,376</b>	<b>42,265</b>
<b>C.</b>	<b>Others</b>						
	- Regional Center	906	143	--	--	--	--
	- Library	168	27	1,759	533	262	66
	- Scholarship	--	--	--	--	--	--
	- Refund of Unpaid Salaries (un-cashed cheques)	--	--	--	--	--	--
	- University Hostel	699	110	--	--	--	--
	- University Press	1,668	264	--	--	--	--
	- Publication Bureau	1,338	211	--	--	--	--
	- Research Bulletins & other Publications	18	3	--	--	--	--

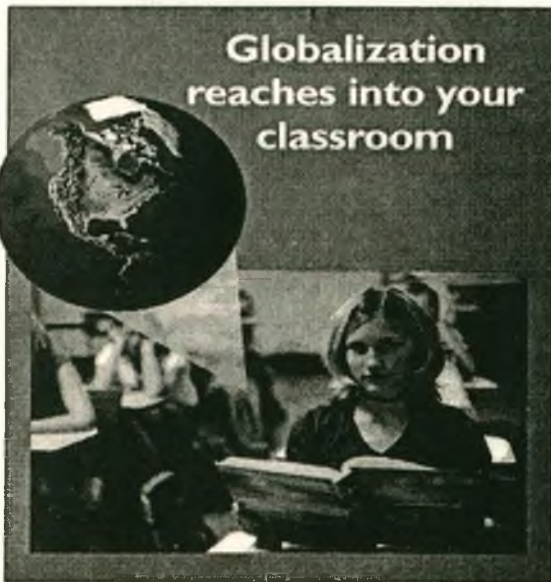
Heads of Receipt	Panjab university		Punjabi University		Guru Nanak Dev University	
	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum	Actual (in Rs. 000) per annum	Per student receipts (in Rs.) per annum
- Construction of Buildings	-	-	15,715	4764	--	--
- Miscellaneous	26,612	4,204	74,952	22,720	43,969	11,157
<b>Total</b>	<b>31,409</b>	<b>4,962</b>	<b>92,426</b>	<b>28,016</b>	<b>44,231</b>	<b>11,223</b>
<b>D. Correspondence Studies</b>						
<b>Total</b>	<b>39,831</b>	<b>6,292</b>	--	--	--	--
F. - Receiving of Loans	--	--	26	8	2,087	530
- Deposits of Interests	--	--	782	237	--	--
<b>Total</b>	--	--	<b>806</b>	<b>244</b>	<b>2,087</b>	<b>530</b>
<b>E. Grand Total</b>	<b>7,63,971</b>	<b>93,913</b>	<b>560719</b>	<b>1,31,327</b>	<b>5,46,676</b>	<b>1,01,717</b>

Source: *Budget Estimates, 2002-03 of Panjab, Punjabi and Guru Nanak Dev Universities, 2002*. The total enrolment figures are taken from University Development in India: Basic Facts and Figures on Institutions of Higher Education, Students Enrolment and Teaching Staff, 1995-96 to 2000-2001, UGC, January 2003.

Note: The per student receipt has been worked out by dividing receipts under various heads by total number of students (excluding enrolments in correspondence courses) in respective universities. However, per student examination fee and receipts on account of registration, migration, certification etc. are arrived by dividing receipts under these heads by total number of students in universities and their affiliated colleges.

# 6

## CHALLENGES AND RESPONSE OF INTERNATIONALIZATION OF HIGHER EDUCATION



- 6.0 Having dealt with issues like teaching learning process, quality assurance, governance and financing of higher education, it is important to deal with the new developments, which are taking place in the system of higher education throughout the world. The scenario of higher education is changing very fast. Many countries are trying to market their educational programmes to India. A recent reports published in the newspapers indicated that about 100 thousand students are going abroad for their studies. India remits nearly 3 billion dollars on account of students going abroad for studies.

### Students Going Abroad for Studies

- 6.1 Three countries namely USA, U.K. and Australia are attracting Indian students to their countries, they are visiting various states capitals including Punjab to attract students. Number of students going abroad for studies from India as well as Punjab has



considerably gone up whereas enrollment of foreign students in India has gone down. For all India this number has declined to almost half. In Panjab University (for which the data are available), it has gone down to 52 from approximately 200 students. There are several reasons for this decline. One of them is that universities of U.K., Australia and USA have also started marketing their programmes in various parts of the world, from where students were coming to India. Every year education fairs are held in different cities. Such education fairs attract students for studies in these countries. This is partly because these countries also offer opportunity to students to earn and study. The Governments of these countries also encourage their universities to attract the students because income from these students support economy of these countries. Governments have urged universities to enroll more overseas students. They have projected demand for global students to the tune of 5.8 million between 2003-2020. Many of the countries are pursuing with the clear policy to attract the students so that they can help and meet the cost of education, as fees charged from them is higher than that from domestic students. On the other hand, Indian universities have not been able to position themselves for marketing their programmes of studies abroad. Some efforts have been made by Educational Consultants India Limited and University Grants Commission to promote Indian education abroad. UGC helps universities to participate in education fairs arranged in USA. Promotion of Indian Higher Education abroad requires much more serious attention than it is presently being given by many universities.

### **Dimensions of Internationalization**

- 6.2 There are several dimensions of internationalization of higher education. The positive aspect of this is the academic exchange between Indian and foreign universities which would benefit both the Indian and the foreign universities. Such internationalization could be in the area of exchange of faculty, collaborative research and exchange of students. Such exchanges are presently taking place with the support of University Grants Commission. But these need to be further strengthened.
- 6.3 The other aspect of internationalization of higher education is marketing educational programme abroad and earning revenue for the country. This aspect has gained importance in the recent past. Many foreign universities have come to India to establish arrangements mostly with the private service providers. One would find that there are about hundreds of arrangements in India in collaboration with foreign universities. A good number of them are in the metros like Delhi, Mumbai and Kolkata and now in the next phase such arrangements would move to capital towns in states and business centres where they find that parents can afford to pay for the education of their children. Such arrangements have implications in terms of comparison by the students of present public system and privately provided education facilities in collaboration with the foreign providers. Therefore, it has direct implications on the public or public supported systems.

These arrangements are informal. Therefore, degrees awarded under such arrangements are not recognized by UGC or AICTE.

### **GATS: WTO Regime**

- 6.4 There is yet another dimension to marketing of education. Education services are included under General Agreement On Trade in Services (GATS) under the WTO Regime. India is one of the signatories of GATS: WTO. Under this regime, education services are classified in five levels namely, primary, secondary, higher, adult and other education. And these services can be provided under four modes, namely, cross border supply, i.e., distance and virtual education; consumption abroad, i.e., by attracting students to their country for studies; commercial presence, i.e., by setting up campuses in foreign countries; and finally by movement of natural persons for providing services to other countries, i.e., teachers going abroad for teaching.

### **Provisions of GATS**

- 6.5 The provisions of GATS further envisage that the same treatment should be given to foreign education providers as given to Indian education providers. It is called 'National Treatment'. Finally, if one country is allowed to operate in India, all other member countries should also be allowed to operate. It is titled as "Most Favoured Nation" concept which means favour one, favour all. Trade negotiations are on. Request for commitment to open higher education sector has been made by many countries to India. If the agreement about opening of it is signed by India under the GATS, the system of higher education of India would be opened to member countries. At the same time, it may also help Indian education to go abroad.

### **Challenges and Response**

- 6.6 The basic challenges, therefore, are (a) to improve the quality of higher education and bring it to an international level, (b) to work out the strategies for identifying the areas of strength for attracting foreign students in India and (c) finally, to position the Indian institutions to attract the foreign students and establish Indian education centres abroad.
- 6.7 These challenges need to be handled carefully. First, by enhancing the quality of education institutions in Punjab and second, by branding the quality of institutions, enabling them to attract foreign students to their campuses and also encouraging these institutions to set up their centres abroad, particularly in the countries where a large Punjabi population is settled such as U.K., USA, Australia, New Zealand, Germany and neighbouring countries. It may be pertinent to elaborate some of these steps.



### **Enhancing Quality of Institution**

- 6.8 Several steps have been suggested for enhancing quality of higher education in Punjab in previous chapters. These steps relate to: recruitment of quality teachers, curricular reforms so as to meet sectoral needs, reforms in examination system, infrastructure improvement, technology inputs and governance of the institutes of higher education.
- 6.9 Along with these steps, one more step that needs to be added is introduction of international component in curriculum of various subjects so as to make the programmes globally relevant and at the same time addressing the problems in national and local. The other step is to introduce flexibility in admission process so as to accommodate foreign students in different programmes of studies.

### **Branding and Promotion of Institutions Abroad**

- 6.10 Punjab State has three universities, which have been accredited as five star. Similarly, it has 22 colleges which have been accredited as A+ or A by National Assessment and Accreditation Council. Universities namely, Panjab, GND and Punjabi have certain departments of excellence. It may help branding these institutions as quality institutions and some of their quality programmes for marketing abroad. A Consortium of group of these institutions should be made and encouraged to position them as transnational education providers. This may require reorienting some of the processes of working to an international standard.
- 6.11 The Consortium should prepare brochures, highlights the areas in which studies are of international standards, and support institutions to establish their information centre abroad as well as take group of faculty members abroad for promoting their programmes. Group of teachers under this Consortium can also hold information sharing and Counseling sessions abroad.

### **Policy Changes in Fee Structure**

- 6.12 To meet these challenges universities should be permitted to change the fee structure to charge full cost and development charges from foreign students. Some universities have individually done it, but it could be coordinated better by the Consortium. The fees could vary keeping in view the nature of programme, the quality of facilities and the cost incurred by respective universities.

### **Infrastructure**

- 6.13 These branded institutions should be helped to upgrade infrastructure of hostel so as to make it liveable by foreign students, particularly those who are able to meet the cost of quality hostel facilities. Each college should have internet facilities as well as visual classroom and video library.

### **E-learning Technologies**

- 6.14 In order to provide quality education within Punjab as well as to students coming from other countries, it is very essential that each of the programmes of studies is electronically oriented by developing e-content and e-learning resources so that knowledge can be made available to the students within and outside India.

### **Structural Reforms**

- 6.15 To improve quality and relevance, colleges would like to associate with eminent institutions in the country. But the present system of affiliation does not permit institutions to seek affiliation from other eminent institutions. Therefore, the policy of affiliation of colleges to a particular university following territorial jurisdiction should be reviewed and colleges should be allowed to get associated/affiliated with eminent institutions for special programmes of studies.

### **Training of Teachers**

- 6.16 Teachers should be oriented to address the issues in international and multi cultural contexts. They should also be oriented to be more friendly with electronic educational technology, namely, video lecture, internet and internet based interaction.
- 6.17 Teachers may be oriented to develop e-content. Consistent efforts should be made so that we are able to develop Reusable Learning Object (RLO) as well as e-content for all the programmes of studies. This will help quality knowledge resources made available to the students within and outside the country. This task has been undertaken by the Consortium for Educational Communication (CEC) of University Grants Commission (UGC). University and College teachers may be encouraged to participate in programmes organized by CEC.

### **Regulation of Foreign Arrangements in Punjab**

- 6.18 Another aspect of internationalization of higher education is to regulate the quality of institutions going abroad, and similarly checking quality of foreign university intending to establish arrangements in Punjab.
- 6.19 There is a general trend that wherever some profit is seen, some spurious poor quality institutions move fast to market their programmes with very catchy advertisements and slogans and attractive market ambassadors. It may be necessary to set up arrangements in Punjab to check such institutions and regulate entry only to genuine institutions.
- 6.20 Punjab should set up a Foreign Education Regulatory Body. This body should register and permit only those institutions, which are accredited by the respective countries and authenticated by the embassies of their country.

- 6.21 This body should also collect information about foreign universities and play an advisory role to students about quality and authenticity of various universities and marketing of their programmes in Punjab. Such advisory role will check students being duped by false promises by ‘fly by night’ institutions. Some of the recommendations made to the effect of meeting the challenges of WTO by four seminars held on behalf of AICTE by ICWWS of SEED are given as **Annexure-6.I**. These recommendations should also be considered by this body.
- 6.22 Some of the above steps will help colleges and universities in Punjab to face the challenges of global competition and the possibilities of positioning branded institutions in Punjab to market their education programmes to other countries.

**SEED – ICWWS**

The recommendations made in the four Regional Seminars on Facing the Challenges of Globalization are summed as follows:

**Awareness Aspects**

It was felt that a conscious effort must be made to spread an understanding of:

- The developments in wake of the opening up of education sector.
- The need to harmonize the industry and university attitude towards research.
- Factually impractical expectations such as level playing fields, which might be desirable but not achievable.

**Horizontal Issues**

An appeal was made for tackling the following issues:

- Reduce the regulations and provide broad guidelines, as the former leads to more violations and corruption.
- Policy roadblocks for export of higher education must be removed urgently.
- Policy initiatives at both State and Centre level are essential.
- Logic on supporting Indian students moving abroad for higher education was questioned. It was suggested that this might be limited to specialized areas only.
- Need to restructure higher education and introduce flexibility and mobility is essential.
- Reforms in governance and management systems are essential.
- Joint efforts of private, public and other agencies must be promoted.
- Public funded institutes must also be encouraged to take international initiatives.
- Various crosscutting and sectoral issues such as duality of the system, impact on access and equity, and social vs. commercial orientation must be addressed on a priority basis.
- Aspects of education as a business enterprise and education as a social endeavor, must be understood.
- The signing of Mutual Recognition Arrangements with various Councils and International Organizations must be expedited.

**Sector Competitiveness**

The following suggestions were made to improve sector competitiveness:

- Export zones for promoting export of higher education should be established. Need to provide infrastructure support was highlighted.
- It was suggested that institutions should seek to build a consortium of institutions to be able to respond to new R & D challenges.
- Feasible financial models should be developed for institutions. It must be widely accepted that institutions can no longer survive on student fee alone. They must produce knowledge, file patents, offer consultancies and identify innovative methods to support their expenses.
- Institutes must learn to package education and file patents on a priority basis.
- A Copyright Society on a pattern similar to SCRIPT for cinematographic and television films, IPRS for musical works, PPL for sound recordings must be set up for managing and protecting educational copy rights. This is important because no single player can handle problems of copyright but a Society of owners of such work, can do so.
- The art of developing 'learning resources' must be spread.
- The need to build brand names must be emphasized.

**Quality Concerns:**

To improve the quality of education imparted, following recommendations were made:

- Relevance of curriculum must be ensured.
- Faculty development programmes must be promoted.
- Comparability with international standards should be achieved.
- Benchmarking exercises should be undertaken.
- Credit systems should be introduced to enable flexibility and mobility.
- Need to regulate quality may be seriously taken up.
- Copyright and patenting of intellectual property by the academic community should be promoted.

# 7

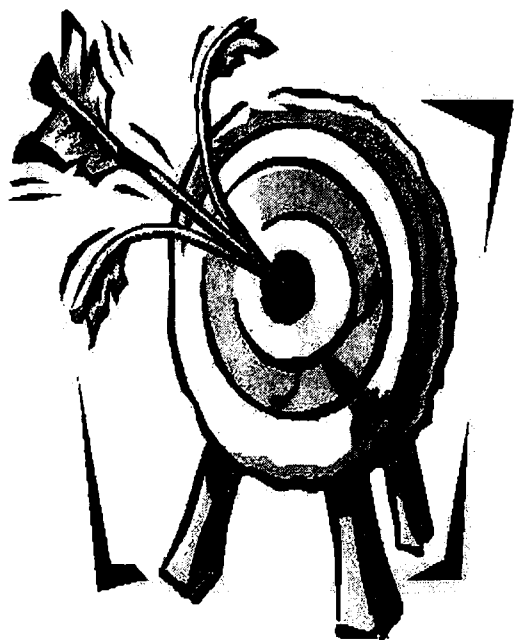
## RECOMMENDATIONS

### Growth of Higher Education: Vision-2020

#### (Term of Reference-1)

7.0 Nearly 7 per cent of eligible age group of population is enrolled for higher education at All India level. The vision is that this ratio should be increased to 10 per cent by the end of this plan term and to 15 per cent by the end of next plan.

7.1 In Punjab, it has already reached 7 per cent of eligible age group population. For Chandigarh the enrollment is almost 11 per cent of eligible population. Keeping these facts in view, it may be reasonable to project that Punjab should be able to enroll at least 10 per cent at the end of Xth plan. In 2020, it should be able to achieve the target of 20 percent enrollment of eligible group of population in higher education. This ratio would compare with the ratio in fast developing countries of the world. We believe this would be possible for Punjab because of its higher per capita income. The future rate of growth in Punjab is



expected to be 8 percent. Keeping in view this rate of economic development and social awareness, desire of people to invest in education, the achievement of this vision appears to be realistic. However, in order to achieve this target, several modes of education, namely, formal education, distance education and new electronic education with the flexible arrangements of entry and exit should be introduced.

- 7.2 The Committee recommends that due care should be taken to diversify higher education while expanding the education system. Specific recommendations with regard to diversification as recommended in the second chapter pertaining to curriculum reforms may be considered by the universities. The state should also encourage post-graduate and research studies as the enrolment ratio in these is relatively poor. There is a very good rate of participation of women in education. In Punjab this rate should be kept up and participation of students belonging to deprived sections of society, namely, SC/ST, may also be encouraged to achieve the target of 20 percent.

### **Distance Education**

- 7.3 With a view to widening the access to low cost higher education, the committee recommends that the Government of Punjab should set up a State Open University by the end of the 10<sup>th</sup> Plan. This will enable the state to achieve the target set for enrolment for higher education in the state. Several skill oriented professional courses, diploma and post-graduate diploma and certificate courses can be introduced by the university which would provide opportunities for skill enhancement specially to those who remained left out, for reasons beyond control, from conventional institutions of higher learning. These recommendations are in line with the national policy about expanding the access to higher education voiced in the Conference of State Secretaries of Higher Education held in New Delhi in 2003.

### **Academies for Girl Students**

- 7.4 A very important phenomenon observed in Punjab is that with a view to facilitating the girl students to receive education, study centres called academies have been opened by the Community / Registered Societies or the Educational Entrepreneurs in rural areas. These study centres prepare girl students for examination as private candidates from their respective universities. The Committee after deliberations and considering these aspects which have several positive and negative implications has come to the conclusion that these study centres facilitate the students to receive coaching and prepare them for examination. These academies are promoting women education and have made their place in the society. Therefore, these should be allowed to send the candidates for examination and should be recognized on the basis of certain norms and guidelines. Such norms and guidelines should help these centres to acquire certain standards to promote effectively the education of women. It may be mentioned that many universities have started/opened distance education

centres. These centres may be encouraged to become the study centres of such open and distance education departments. Along with this, the centres could also be considered by the state government for promotion of vocational courses for the girl students.

## II

### Teaching Learning Process

- 7.5 Effective teaching learning process is a pre-requisite for quality in higher education. It requires not only an uninterrupted flow of accurate information to students but also its conversion into knowledge. All the affiliated colleges/universities, in Punjab too, depend mostly on classroom method of imparting educational instructions. But this method is utterly inadequate to generate knowledge. As such, higher education seems to have lost its social relevance. It is so particularly in the case of the programmes in Arts that enroll about two-third of the candidates at undergraduate level. In some other disciplines, though a provision for field work (in the form of project report) exists, but a provision for assignments and seminars is generally lacking.

### Assignments and Seminars

- 7.6 The Committee suggests that assignments, seminars etc. should be made an integral part of the course curriculum in each programme. It should be given due weightage (at least 20%) in the form of internal assessment in each programme. Besides the performance of the candidate in assignments and seminars, it should also take into account his performance in class tests and regularity in attending classes. The concerned Faculty should decide the inter-se-weightage to each of these components of internal assessment.

### Field Work

- 7.7 Field/Project work should be separately integrated into the course curriculum in each programme. At post graduate level, project work be included in the syllabus of each year of the programme with due weightage immediately. At the under graduate level, this should be introduced in the syllabus for each of the elective subjects of the degree programme.

### Continuous Evaluation

- 7.8 The suggested continuous system of evaluation will raise the quality of higher education in the state. It will also apprise the teacher of the weaknesses and strengths of the students. The teacher can accordingly reformulate his teaching

strategies. Indeed an objective and continuous evaluation of the student is the need of the hour.

- 7.9 Doubts have been expressed about the genuineness of the present system of evaluation being followed in all the universities of the state. To declare results in time, examiners are invited at the evaluation centres to evaluate answer books. This on-the-spot system of evaluation though has come to be accepted in all universities of the state as a great facilitator for ensuring timely completion of evaluation work and hence declaration of results but it has limitations of its own. The set of examiners who actually undertake evaluation in these evaluation centres every year, indeed, is the same. Consequently, it has become more or less a routine activity and is generally devoid of professional excellence. The universities should develop an exhaustive database of the teachers working in the colleges within their respective jurisdictions. It should be made compulsory for every teacher to evaluate a certain number of answer books in his/her area of interest. Teachers from other universities within the state should also be actively involved in the evaluation exercise. These teachers can be drawn from the lists prepared by other universities in the state.

### **Semester System**

- 7.10 Semester system suits best for continuous evaluation of the students. While immediate shifting of all the programmes that are offered in the affiliated colleges of the state to semester system may not seem advisable, but the system must move towards that in next five years. Immediately all courses being offered at the university level in the state should be shifted to semester system. Further, so as to ensure transparency in the evaluation of the students, the universities in Punjab should adopt such a system, which must provide access to students to evaluated answer books. Students should also have access to the record pertaining to their internal assessment.

### **Flexibility in Programmes of Studies**

- 7.11 At present educational instructions in all the educational institutions are imparted following a rigid and structured syllabus that have been prescribed for each course. The syllabus in each course comprises of a fixed number of compulsory / elective papers which a student has to clear to obtain a degree. Generally, only the papers that strictly fall within the same discipline are prescribed for each course, thus limiting greatly the possibility of inter disciplinary approach to education. This also reduces the social relevance of education. For all round development of the personality of the student, flexibility must be ensured while formulating the syllabus for the course. In each programme some core papers should be identified. But the students will have to clear some more papers for obtaining a degree. They should be given freedom to choose these papers to be drawn from the same as well as allied disciplines. This will provide the student



an opportunity to develop his/her overall personality and prepare them for the job market in a better way.

- 7.12 The adoption of this system will also facilitate the switch over to credit system which would not only do away with the rigidity in the present system but will also open a whole vistas of opportunities of higher learning for the students. This will greatly take care of the problems that are generally confronted at the time of declaring equivalence of the degrees. This will also reduce the hardships that the students face when they seek migration from a university outside the state to a university in Punjab.

### **Teachers and Students**

- 7.13 Key components of quality of teaching and learning process are teachers and students. The quality of teachers depends on their basic qualification, experience and their continuation and updating of knowledge through research and extension activities. The quality of students depends on the level of attainment at the school or undergraduate levels and their contribution in co-and extra curricular activities. The quality of teaching and learning process is combination of these two human factors and physical infrastructure namely, library, laboratory and overall ambience of the colleges and universities. All these three factors put together in an interactive mode create the quality of teaching learning process. To make this interactive process effective, adequacy of staff, students and infrastructure become the first prerequisite. The second requisite is clear delineation of role and responsibilities and expectations from each component involved in the process. The committee examined some of these aspects in the context of teaching and learning process of students in the State of Punjab.

### **Adequacy of Teachers**

- 7.14 There are approximately 15000 teachers in Higher Education catering to the need of approximately 2,55,000 students. Apparently the number of teachers seems to be adequate. But this is an overall picture. The teacher student ratio being nearly 1:17 is good. This ratio, however, does not hold true for all types of colleges and universities. The teacher student ratio in colleges is much lower. Though number of teachers in colleges is approximately 12000 yet actual number of teachers on record and supported by the Government of Punjab is less than half. The other half are either adhoc or temporary staff appointed to carry on the process which deprives the college higher education system of academic assets, as adhoc and temporary staff would always keep searching for alternative employment. This situation also makes it difficult to groom academic resources keeping in view the long term development. Linked with this problem is clear definition of role and responsibilities of teachers. Expectation from them is a general understanding but there is no specific document being agreed to by the teachers and employers. The recruitment process needs to be speedy and well founded.

## Students

- 7.15 The proportion of students to total population needs to be enhanced as stated in the first chapter. Along with this the diversification of subjects of studies is a must. Present concentration on a few selected programmes of studies needs to be changed. The participation of students in extra and co curricular activities is fairly good. One of the weakest aspects, similar to that of teachers, is that there is no document specifying precisely the role, responsibilities and expectations from the students. This is particularly with respect to teaching learning programmes, but for requirement to attend certain percentages of total classes. In fact each student should be well informed with regard to assignment, field work, extension work, co and extra curricular activities. It should become part of prospectus of the institution and conditions of registration as students. The students' attainment in all the activities and academic attainment should become part of comprehensive evaluation.

## New Technology Input – Higher Education Channel

- 7.16 Along with the reforms in conventional system teaching and learning process, there is a need to introduce new technology inputs in teaching of the students. One of the major developments in the field of communication of higher education knowledge has been launching of 24 hour higher education channel named as Vyas Channel, by U.G.C. – CEC and Ministry of Human Resources Development. This channel transmits under-graduate and post-graduate syllabus-based programmes as well as enrichment educational programmes. Subject bands have been created to facilitate students and teachers to remember the days of telecast of a particular subject. It would be very useful if this channel is received by each of the colleges and universities in Punjab. Watching of this channel by the students and teachers will considerably help in improving the quality of higher education in Punjab. The Committee, therefore, recommends that the facilities of receiving the channel may be provided in each of the colleges and the universities in Punjab. It may be very appropriate if cable providers of Punjab are also approached to carry the disciplines of this channel to the homes of the people.

## Internet Connectivity

- 7.17 Yet another important technology input in the teaching learning process is providing Internet connectivity in the colleges of Punjab. This will enable the colleges and all parts of Punjab to have access to knowledge available on various websites. University Grants Commission is also providing for enhancing the connectivity in the colleges. The Government of Punjab may approach U.G.C. to provide such connectivity to colleges in backward districts of Punjab with the support of Central Government. It may be mentioned that the UGC is providing support for e -content development by the teachers. Once the e-content is developed, it will be made available on internet. Colleges and Universities in the

State should participate in the process of e-content development and take advantage of knowledge available on the internet.

### III

#### Quality Assurance

- 7.18 A system of quality assurance has been put in place by UGC in the form of National Assessment and Accreditation Council. This body is assessing quality of institutions of higher education in the country. It has assessed all the three universities and 71 colleges (out of 185 Government and Private Aided colleges) and one un-aided college in Punjab. A good number of them have been accredited with very good grades (22 with A+ / A grade). As a part of vision, all the colleges should be accredited by next couple of years. The committee also recommends that for assessing the quality of higher education in the state a mechanism of quality assurance on the selected parameters may be set up in the state. All institutions of higher education should be assessed on the selected parameters and the analysis of quality of the system may be placed before the legislative assembly. This will ensure public accountability of the system of higher education.
- 7.19 Quality of education depends upon several factors. Key factors are quality of teachers, teaching learning process, infrastructure support, technology input and system of evaluation of students as well as monitoring of quality of institutions of higher education. Recommendations with regard to technology input reforms of teaching learning process, and students' evaluation have been made above. Recommendations with regard to monitoring of quality as well as creating a new system of testing at the state level may be made here. The Committee recommends that the system of Annual Self Assessment and three yearly assessments by the State should be instituted in Punjab. Self assessment reports of each University and Institution may be processed by the Quality Assessment Body at State level and the report of the Assessment after the 3-yearly external review may be submitted to the Assembly for public accountability of institutions of higher education. This could be handled by the State Council of Higher Education as suggested under the reforms for good governance.

#### State Level Testing Services

- 7.20 In order to widen the scope and reach of higher education, State should institute State level testing to assess the achievements of the students on the pattern of classification needed. The concept of qualifications frame work is that the criteria for level of attainment and outcome of learning are prescribed for each level in consultation with industries and employer organizations. On the basis of level descriptors, testing of persons, he/she whether had studied in college or learnt at

home or on the job situation, is conducted. Those who qualify are awarded certificates of attainment of that particular qualification. This will be an innovation. Punjab would lead other states if it succeeds to implement this concept.

- 7.21 There was scheme of introducing national level testing service. It, however, could not take off. It is high time now to introduce these services not only at the national level but also at the state level. Punjab should become the first state to introduce state level testing services for testing the attainment of students who study in colleges, Universities or at their own place. This test should be organized on the pattern of qualifications framework. A state level qualifications framework may be evolved and testing for each of the qualifications may be conducted. Initially this task may be given to State Council of Higher Education. As the things progress, an institutional mechanism could be evolved. Such a system will become self-supporting in due course.

## IV

### Good Governance

- 7.22 For good governance some structural reforms in decision-making process are essential. Some of these reforms are suggested below:

### Decision Making Bodies

- 7.23 It has been observed that the number of members in the apex bodies is large and unmanageable. As per the Acts, various constituents of society are represented in the Senate. As the constituents expanded, the number of members of Senate has also increased and has become unmanageable. This problem was observed not only in Punjab but also in many other states in the country. The University Grants Commission set up a Committee under the chairmanship of Professor Gnanam, which suggested various measures and particular reforms in the governance of universities and colleges. The Committee came to the conclusion that the size of the Senate, Syndicate, and Executive Council should be reduced. Analysis of the Punjab situation has revealed that the number of members on the Senate in all the three universities varies between 75 – 100. To manage this large number in a meeting and arrive at a meaningful decision is very difficult particularly when interests of members considerably vary.
- 7.24 The Committee after deliberation recommends that the size of the Senate should not be more than 45 after giving due weightage to all the stakeholders. As far as the number of members of the Syndicate is concerned, it seems manageable. However, the composition as suggested by the Committee be considered seriously. The Committee recommends that the Board of Studies should be given

decision-making power to make all academic decisions. The size of Academic Council, which is very large, should not be more than 40 members.

- 7.25 These structural reforms are suggested in order to enable effective decision-making and smooth functioning of the various bodies of the Universities.
- 7.26 The Committee also deliberated on the issue of role of Senate and Syndicate in Panjab University. There is overlapping of powers in these bodies in this University, whereas this problem does not exist in other universities. In the case of Panjab University, the decisions of the Syndicate are ratified and the Senate takes final decision. This gives rise to an anomaly. The Executive Council/Syndicate should be the final decision making body with regard to executive functioning of the university and should be accountable for such decisions. The apex body should have power with regard to policy making. The executive powers should be left with the executive body, i.e., Syndicate. Following this principle, the committee recommends that powers of Syndicate and Senate of Panjab University, Chandigarh should be restructured and necessary amendments on the suggested lines should be carried out in the Acts. Punjab Government should make these recommendations available to the Government of India for its consideration and necessary action.
- 7.27 A new model of composition of Senate, Syndicate, Academic Council, Faculties and Boards of Studies has been proposed at Annexure 4.III and 4.III-A, B, C, D, E. In brief these reforms pertain to: (i) reduction in size of Senate, Syndicate and Academic Council, (ii) restructuring of powers and responsibilities of Senate/Syndicate/Executive Council, (iii) restructuring the academic council and (iv) empowering the Boards of Studies. These are in conformity with the recommendations made by some committees at the Central Government level and the principles of good governance. The reforms suggested will help in good governance and smooth functioning of universities in the State.

### **Planning and Development Committee**

- 7.28 As far as the colleges are concerned, the Committee recommends that Planning and Development Committee consisting of local people and alumni is constituted for mobilization of funds and development of colleges. Committee also recommends that there are several colleges, which have got potential to become autonomous. These colleges may be encouraged and supported to become autonomous.

### **Autonomy to Colleges**

- 7.29 With regard to the colleges, the Committee after deliberation has arrived at a conclusion that the present system of affiliation puts severe constraints on the colleges with regard to (a) curriculum reforms (b) system of examination and (c) introduction of flexibility in the programmes of studies. This problem is not only

specific to Punjab but exists in many other states of the country. University Grants Commission seriously considered this matter and introduced a scheme of Autonomous Colleges. The advantage of the scheme was greatly taken by States in Southern India. However, Punjab and some neighbouring states could not take advantage of this. However, there is a national level urge that the autonomy should be given to the colleges so that they can bring about necessary reforms in teaching & learning process and the system of evaluation. The Committee, therefore, recommends that 10% of the colleges (which are accredited by NAAC with A+/A grade and are willing to take this responsibility) should be given autonomy. By 2020 a large number of colleges should be given autonomous status. This is the need of the time. These colleges should be given responsibility to administer their programmes of studies effectively and to evaluate the students for award of degree. It may be pointed out that many of the colleges in Tamil Nadu were given autonomy. In course of time, a good number of them have been made university level institutions. This has happened not only in India, but also in UK, where all the polytechnics have been converted into university level institutions. This is a significant method to bring the improvement of quality in the institutions and to encourage them to perform. This recommendation is somewhat radical but this is the future need of our nation as well as of this state. Punjab should take the lead in making the colleges responsible for their academic and other decisions. In due course of time they should be empowered to award degrees.

- 7.30 The Committee also recommends that the strong measure of quality control of autonomous colleges and degree granting colleges should be put in place. These measures should be: (a) regular self and state level assessment of the colleges every three years, and (b) assessment by NAAC every five years. The colleges found to be below the accreditation mark should be given notice to improve upon, failing which autonomy may be revoked. This recommendation has been made with a view to improving the quality of education in universities and colleges of Punjab.

### **State Council of Higher Education**

- 7.31 With a view to coordinating the development of system of higher education in a state and effectively liaise with the University Grants Commission, a scheme was initiated by the UGC soon after the 1986 Policy on Education announced by the Government of India. Among the states, which took advantage of this scheme, were Andhra Pradesh, Tamil Nadu and West Bengal. The Committee after deliberations arrived at the conclusion that this is a very good system of coordination of development of universities and colleges and effective liaison with the University Grants Commission. It may be mentioned that Punjab Government constituted the State Council of Higher Education by a notification in 1996 and reconstituted it in 1998. But it did not take the shape as envisaged in the guidelines of UGC. Presently, issues are taken up in the Coordination Committee of Vice Chancellors. In order to give a proper system of coordination

as suggested by the UGC, the Committee recommends that Government should reconstitute State Council of Higher Education in Punjab on the lines of UGC Guidelines. This will replace the present informal system of coordination committee of Vice Chancellors. It would regularly work for evolving policy parameters, monitor the development of higher education and ensure implementation of national level schemes initiated by the UGC and other central government agencies such as Department of Science and Technology and so on. It will also ensure proper coordination with regard to internationalization of higher education and issues of international trade in higher education.

- 7.32 This Council may also undertake the work of monitoring the quality of institutions of higher education by processing the self study reports and conducting 3-yearly external reviews and submit its report to assembly. This body should also conduct state level qualifications frame work test as recommended above.

## V

### **System of Funding (Terms of Reference – 2 and 3)**

- 7.33 Mobilization of funds for higher education has engaged attention of every state government as well as central government in the country. Institutions imparting higher education are also equally concerned with this issue as state funding of education is drying up progressively. The committee deliberated on this aspect and looked into financial situation of universities and colleges. It also worked out unit costs, studied contribution of students and allocations of funds by the state. Recommendations with regard to terms of reference 2 and 3 are presented together as these are inter-related. Keeping in view the serialization of terms recommendation with regard to term 2 is presented first. It is followed by term 3. It is however advisable to read these together.

### **Funds from Community Sources (Term of Reference – 2)**

- 7.34 We recommend that a Development Committee may be set up in each of the colleges and universities. This committee may raise funds for the development of the institution from the community. The Committee may consist of eminent persons of the society namely, educationists, industrialists, agriculturists and government officers. Funds so mobilized may be used for infrastructure development of the institutions. A similar experiment has succeeded in other states and in other countries. Funds so mobilized should be used for development purposes with the approval of the committee and should not constitute part of “state exchequer funds”.

7.35 Besides mobilization of funds from students, universities and colleges should develop programmes and schemes of mobilization of funds. Some of the programmes & schemes often used in many parts of the world as mentioned below could be explored:

- Renting out the space.
- Renting out Auditorium for social functions.
- Renting out space after college hours for other academic activities.
- Making library open to public use on the basis of service charges.
- Participation in national/state level survey and research activities.
- Providing counseling and guidance to people.
- Consultancy to developmental agencies.
- Conducting household surveys to identify developmental needs of the community and informing the developmental agencies.
- Short-term courses on self-financing basis for the farmers, traders, community people, housewives and youth.
- Printing, publication of courseware and material for studies.
- Formation of Alumini associations and mobilization of funds from them.
- Seeking donations from philanthropists and developing a corpus fund. Also seeking incentive grant from UGC.
- Approaching UGC, DST and other agencies and applying for grants under the various schemes of these agencies
- Holding of cultural and sports events for the benefit of development of colleges.
- Seeking NRI funding for specific developmental needs and building corpus.
- Event management for community and government departments with the help of students.

7.36 These are some of the alternative sources of funding which can be explored by the colleges and universities. Universities have been mobilizing funds from students and colleges through various funds and affiliating charges. Our recommendation is that focus should shift to mobilization of funds through service to community, research support, renting out space, alumini support, NRI support, event



management for the government and community, taking full advantage of various UGC, DST and other Government schemes and finally developing good corpus fund and earning interest income on the same.

- 7.37 We would like to recommend that on the lines of Central Government and UGC schemes a matching grant of rupee for rupee or an incentive grant to develop the corpus fund may be given to Colleges & Universities. The interest earned from corpus fund would relieve the demand for more funds from the State Government.

### **Funds from Government (Term of Reference 3)**

- 7.38 Under 95% deficit grant-in-aid scheme the Government covered posts till 1981 and some of the posts sanctioned in 1986. However, presently claim of 95% of the deficit submitted by the colleges is never fully met after the year 1998-99. Since then the Government has not been able to meet the claim of the colleges as committed by the Govt. of Punjab. It has also been observed that since enrolment in the colleges has increased and colleges were required to appoint the staff for teaching the students, the posts needed to be covered under the grant-in-aid scheme to meet increased strength of students.
- 7.39 The tuition fee charged from the students has also not been increased since 1981 in the government colleges. However, private aided colleges affiliated to three universities of the state are charging the increased fee from the students as recommended by the respective universities. The tuition fee recommended by these universities also varies from university to university. The tuition fee as recommended by the respective universities is higher than the fees recommended by the State Govt.
- 7.40 The system of financing is, therefore, presenting a very hazy picture, as the fee charged from the students varies from college to college.
- 7.41 The amount reimbursed by the state to colleges is 95% of the deficit worked out on salaries actual expenditure minus tuition and admission fees. The amount of admission fees and tuition fee is calculated on the basis of increased strength of students and as prescribed by respective universities. However, as stated above colleges are not being paid amount as per their claims due to poor budget allocation by Department of Finance. Under the circumstances, some colleges resort to charge the students under 'teacher welfare fund' or pay less to the teachers. The Committee recommends that state should through regulatory measures, ensure that proper procedure of remuneration and the payment to the teachers is worked out.
- 7.42 The situation is that on one side committed expenditure is not being met and on the other side, due to increase in enrolment, the colleges have to recruit the staff, but the salary of these teachers is not covered by the grant-in-aid system. These

teachers are, therefore, being paid less salary. The scheme of grant-in-aid seems to have ceased at the level of 1981 / 1986 as far as the government support is concerned but the system has grown in response to the demand from the students. Under the circumstances, the scheme of grant-in-aid needs to be re-examined and a rational system of funding of colleges needs to be worked out. In view of the situation, it may be appropriate to review the scheme of deficit financing and introduce unit cost based method of financing.

7.43 Till this happens, the following steps be taken :

- (a) The state should meet the commitment of 95% for those posts which are covered by it under the grant-in-aid scheme.
- (b) This should be possible as burden on the state has already come down, as the scheme of grants-in-aid has not been extended for all the teachers who were recruited after 1981/1986, in the light of increase in enrolment.

7.44 State should meet the commitment of 95% for those posts, which are covered by it under the grant-in-aid scheme. This should be possible, as the scheme was not extended for all the posts created after 1981.

### **Fees and Funds**

7.45 The Committee would have liked to recommend that the scheme be extended to 2003 in the larger interest of developing higher education in the state, but we understand that the financial crunch is making it difficult for the state to support such an idea. We, therefore, suggest that commitment made by the state for the required posts be met by the state and the colleges may be allowed to charge higher fees to meet additional expenses on account of increase in staff. As for the Government Colleges, the tuition fee has not been increased since 1981 and the burden on state exchequer for these posts has gone up many fold. It may be appropriate to increase the tuition fees from Rs.12/-, Rs.35/- and Rs.70/- in different colleges to Rs.100/- per month for all the colleges which are fully supported by the state government or receiving grant-in-aid. The state should pay 95% of the deficit. As far as additional teachers appointed after 1981 are concerned the college should mobilize funds to pay the teachers. It may also be pointed out that even +2 stage is also covered by the colleges sector. In our view, this burden should be borne by the school sector, and the amount thus saved may be used for payment of deficit grant.

7.46 It has also been observed that presently fees and funds constitute 6% in government colleges and 40% in private colleges of the total expenditure of colleges. The Committee considering all aspects, is of the view, that there is a need to increase the fees and funds for rural area colleges. However, there is very little scope for the increase in the fee and funds in the private aided colleges as students already contribute upto 40% of total expenditure. In order to improve the

quality of education in government colleges, the fees and funds may be increased upto 25% of the total expenditure. This would mean increase in tuition fee as well as various funds. The total burden of the students will increase from nearly Rs.800/- to Rs.3,200/-. This would be four times of the present base. It would account for nearly 25 percent of per student cost. This would largely bridge the gap between private and government colleges.

- 7.47 It may also be mentioned that Committee had given a similar recommendation in the interim submission for the purpose of consideration of the government. However, government thought it fit to increase fees & funds much more than what was recommended. This was, however, rolled back by the government. The Committee is of the view that the matter of increase in fees should be judiciously considered.
- 7.48 This increase in tuition fee to Rs.100/- from all the students will fetch a good proportion of amount, which is required to meet the deficit. This additional amount coming through increase in tuition fee may add to the resources of the state exchequer. Other funds to the tune of Rs.2,000/- per month from students should be allowed to be retained by the colleges for their quality improvement activities.

## VI

### **Challenges and Response of Internationalization of Higher Education**

- 7.49 To meet the challenges of internationalization of higher education, particularly in the context of General Agreement on Trade in Services under WTO regime, Universities and Colleges of Punjab should work out strategies to (a) enhance the quality of higher education so as to be comparable with international institutions (b) to identify the areas of strength so as to attract foreign students; and (c) plan to establish campuses abroad.
- 7.50 It is recommended that the Universities and colleges with A+ / A grading by NAAC may be encouraged to attract foreign students and also be allowed to set up their campuses abroad.
- 7.51 A Consortium of group of these institutions should be formed. This Consortium should work for promotion of these institutions abroad. This Consortium could also join a similar group set up by the UGC under its scheme of promotion of Indian education abroad.
- 7.52 The following steps will help strengthen the quality and meet the challenges of internationalization: