

# 11: THE PHYSICAL FACILITIES III: THE KATHMANDU VALLEY CAMPUSES: A PLAN FOR RATIONALIZATION

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## Introduction

The Facilities Rationalization Study of Tribhuvan University was undertaken by the Institute of Engineering Consultancy Services (IECS) of the Institute of Engineering, Tribhuvan University for Assessment of Tertiary Education Project (ATEP). The Study had the following objectives :

- to examine the long term needs for Tribhuvan University facilities in Kathmandu Valley and
- to formulate recommendations to address the long term development needs in general and to specifically recommend the buildings that are not needed and to propose the method of disposal in the light of policy enactments to phase out the Proficiency Certificate Level (PCL) Programmes from all the Institutes and faculties of Tribhuvan University and the policy initiative to introduce the 3 year Bachelor programmes in the Institute of Science and Technology and the faculties.

Based on the enrolment figures for PCL and equivalent programmes as well as the Three-Year Bachelor's programmes projected till 2003 A.D., different developmental scenarios were developed. The scenarios developed are physical facilities rationalization scenarios and are not at all scenarios related to educational policies. The physical facilities development scenarios developed are based on the sustainability of the programmes, many of which are offered by Campuses which are in close proximity to each other. Because of the unnecessary duplication of the programmes, many of the existing Campuses are multidisciplinary Campuses, which have higher operating costs than Campuses that are unitary and multi-level in nature.

Of the 22 Constituent Campuses in the Valley, the central campus of TU., viz. Kirtipur Campus, which offers only postgraduate courses and the technical campuses of the Institute of Engineering and the Institute of Medicine, have not been included in the Facilities Rationalization study because of their unique characteristics. The remaining 16 Campuses, which are given below, have been covered by the Facilities Rationalization Study of Tribhuvan University:

### **Bhaktapur District**

- i. Bhaktapur Campus
- ii. Sano Thimi Campus

### **Lalitpur District**

- i. Patan Campus

### **Kathmandu District**

- |                                   |                                |
|-----------------------------------|--------------------------------|
| i. Amrit Science Campus           | vii. Public Youth Campus       |
| ii. Lalit Kala (Fine Arts) Campus | viii. Ratna Rajya Laxmi Campus |
| iii. Mahendra Ratna Campus        | ix. Saraswoti Campus           |
| iv. Nepal Commerce Campus         | x. Shanker Dev Campus          |
| v. Nepal Law Campus               | xi. Tri-Chandra Campus         |
| vi. Padma Kanya Campus            |                                |

#### Campuses with special characteristics in Kathmandu District

- |                       |                                  |
|-----------------------|----------------------------------|
| i. Bishwabhasa Campus | ii. Public Administration Campus |
|-----------------------|----------------------------------|

In 1991/92, the total enrolment in 14 Campuses (excluding Bishwabhasa Campus and Public Administration Campus) was 44, 679. The affiliated campuses had an enrolment of 8,795. Percentage wise, 83.55% was enrolled in the constituent campuses with the remaining 16.45% enrolled in the affiliated campuses.

The student enrolments for the period 1988/89 - 1992/93 in the sixteen campuses that were studied are as follows :

**Table 11.1: Student Enrolments for the Period 1988/89 - 1992/93 A.D.**

SN	CAMPUS	TOTAL STUDENT ENROLMENT				
		1988/89 (BS045/46)	1989/90 (BS046/47)	1990/91 (BS047/48)	1991/92 (BS 048/49)	1992/93 (B.S.049/50)
1	Bhaktapur Campus	764	949	949	1136	1077
2	Sano Thimi Campus	150	284	284	306	409
3	Patan Campus	4695	4765	4765	5704	4304
4	Amrit Science Campus	1793	1801	1801	2209	2067
5	Lalit Kala Campus	169	206	206	246	253
6	Mahendra Ratna Campus	981	1782	1782	1535	2160
7	Nepal Commerce Campus	1568	2510	2510	3605	3664
8	Nepal Law Campus	2708	2793	2793	3859	3805
9	Padma Kanya Campus	3715	5032	5032	6044	5271
10	Public Youth Campus	2743	2580	2580	2998	2629
11	Ratna Rajya Laxmi Campus	3272	4452	4452	5089	5276
12	Saraswati Campus	3250	3293	3293	4937	3079
13	Shanker Dev Campus	2028	3566	3566	4151	3707
14	Tri-Chandra Campus	3143	2395	2395	2860	2656
15	Bishwabhasa Campus	724	680	680	1040	521
16	Public Administration Campus	101	466	466	484	396
	<b>TOTAL</b>	<b>31804</b>	<b>37554</b>	<b>37554</b>	<b>46203</b>	<b>41274</b>

An analysis of the enrolment figures for the year 1992-93 indicate an enrolment of 1.26% in programmes of short duration, 53.52% in certificate courses, 36% in Bachelor courses and 9.22% in Master's.

In 1991/92, 54.37% of the students studying in 14 constituent campuses were from outside the valley. In 1992/93, the percentage of students from outside the valley was 44.85.

The faculty-wise distribution of students in the 1st Year of PCL in 1992/93 was found to be as follows :

**Table 11.2: Faculty-wise Distribution of Students in PCL 1st Year, 1992/93**

Science	:	19.27%
Humanities	:	38.12%
Management	:	33.27%
Law	:	5.93%
Education	:	3.39%

The average unit cost (based on recurrent expenditures divided by enrolments) of the Campuses for the 3 year period 1990/91 to 1992/93 have been found to vary from a low of Rs. 1,156 for Shanker Dev Campus to a high of Rs. 12,326 for Sano Thimi Campus. The average enrolments and average unit costs of the Campuses for the 3 year period 1990/91 to 1992/93 are given hereunder :

**Table 11.3: Average Enrolments and Average Unit Costs for the Period 1990/91 - 1992/93 A.D.**

SN	Campus	Average Enrolment (1990/91-1992/93)	Average Unit Cost (1990/91-1992/93) (Rs)	Ranking Lowest to Highest
1	Bhaktapur	854	5,923	12
2	Sanothimi	512	12,326	15
3	Patan	4,921	3,375	9
4	Amrit Science	2,024	5,027	11
5	Lalit Kala (Fine Arts)	235	8,169	14
6	Mahendra Ratna	1,826	3,468	10
7	Nepal Commerce	3,260	1,328	3
8	Nepal Law	3,486	1,566	5
9	Padma Kanya	5,449	2,603	8
10	Public Youth	2,736	1,328	3
11	Ratna Rajya Laxmi	4,939	1,294	2
12	Saraswati	3,770	1,793	6
13	Shanker Dev	3,741	1,156	1
14	Tri-Chandra	2,637	6,468	13
15	Bishwabhasa	747	2,023	7

Some of the inferences that can be drawn from an analysis of the unit costs are as follows :

- a. Small campuses tend to have higher unit costs,
- b. Unitary campuses, except those offering science and education, tend to have relatively less unit costs compared to multidisciplinary campuses,
- c. Campuses offering science and education, whether unitary or multiple in nature, have higher unit costs and
- d. Campuses offering courses of different levels of the same Faculty tend to have less unit costs than those which offer multi-level courses of various Faculties.

Based on an analysis of unit costs and the inferences that have been made, the following preliminary recommendations can be made on facilities rationalization :

- a. Small campuses should increase their intake capacity or be merged with other campuses offering courses of the same nature if units costs are to be lowered,
- b. The concept of multiple campuses requires reconsideration from the perspective of increasing its operational efficiency,
- c. Offering various courses of the same Faculty in many campuses without considering their economy of scale also needs rethinking,
- d. The University should formulate a firm policy in the allocation of its resources to various campuses (adopting an incremental annual budgetary policy will continually raise the unit cost of some small campuses),
- e. The enrolment capacity of the campuses should be optimally determined on the basis of available physical facilities,
- f. Teachers assignment in the campuses should also be based on functional ratio in order to maintain a reasonable unit cost and
- g. The University should undertake a study not only to analyse the unit cost situation but also identify implementable measures to improve the cost efficiency of these Campuses.

Based on existing trends and parameters, the PCL and equivalent level enrolment in the 16 Campuses has been projected to reach 48,413 by the year 2003 A.D. Based on the same trends and parameters, the total enrolment in the 3-year Bachelor course is projected to reach 48,248 by the 2003 A.D.

If five (10+2) schools come up every year from 1994/95 onwards (Scenario I), then the number of students in the (10+2) schools is expected to be 21,246 by the year 2003 A.D. If fifteen (10+2) schools come up every year from 1994/94 onwards (Scenario II), then the number of students in the (10+2) schools is expected to be 44,958 by the year 2003 A.D. Under Scenario II, the enrolment capacity of the (10+2)

schools as projected for the year 2003 A.D. should be able to accommodate the expected PCL or equivalent student enrolment projected for the year 2003 A.D., in spite of the fact that the projection is based on current trends and parameters. As the current trends and parameters are expected to change due to changes in the educational policies, there should be surplus capacity in the (10+2) schools because of the decrease in the PCL or equivalent student population.

Based on prevalent regional norms of 1.2 sq.m./student in the classrooms and 5-10 sq.m./student in the various laboratories, the optimum enrolments that can be accommodated in the existing classrooms, lecture halls and laboratories of the different Campuses (based on a detailed spatial analysis given in Appendix II and the floor plans given in Volume II) vary from a low of 96 students per shift for Public Administration Campus to a high of 1,704 students per shift for Padma Kanya Campus. The optimal enrolment per shift in the sixteen Campuses that were studied works out to 11,592. If the Campuses that already have a reputation for certain type of courses as well as the campuses identified as district campuses and those that offer unique courses (such as Bishwabhasa, Public Administration) or are unique in nature (such as Padma Kanya Campus which is an all-girls Campus) are allowed to operate two shifts, then the optimal enrolment that can be accommodated works out to 20,040. The 1992/93 enrolment, the average shift-wise enrolment, the enrolment per shift suggested by the Campus, the optimum enrolment capacity per shift as per spatial norms, the recommended shifts and the optimal enrolment based on the recommended shifts for the sixteen campuses that were studied are as follows:

**Table 11.4: Optimum Enrolment Capacity**

SN	Campus	1992/93 Enrolment	Average Shift-wise Enrolment 1992/93	Enrolment per shift suggested by Campus	Optimum Enrolment Capacity as per Norms	Recommended Shifts <sup>1</sup>	Total Enrolment as per Norms
1	Bhaktapur	1,077	539	650	480	2	960
2	Sano Thimi	409	409	1,000	912	2	1,824
3	Patan	4,304	1,435	1,187	1,152	2	2,304
4	Amrit Science	2,067	1,034	570	816	1	816
5	Lalit Kala	253	253	125	168	1	168
6	*Mahendra Ratna	2,160	1,080	1,000	576	2	1,152
7	Nepal Commerce	3,664	1,832	1,400	816	1	816
8	*Nepal Law	3,805	1,903	1,040	528	2	1,056
9	Padma Kanya	5,271	2,636	2,350	1,704	2	3,408
10	Public Youth	2,629	1,350	1,000	768	1	768
11	* Ratna Rajya Laxmi	5,276	1,759	834	816	2	1,632
12	Saraswati	3,079	1,027	630	576	1	576
13	Shanker Dev	3,707	1,236	760	624	2	1,248
14	* Tri-Chandra	2,656	886	1,004	1,344	2	2,688
15	Bishwabhasa	521	174	200	216	2	432
16	Public Administration	396	198	175	96	2	192
	<b>TOTAL</b>	<b>41,274</b>	<b>17,751</b>	<b>13,925</b>	<b>11,592</b>		<b>20,040</b>

<sup>1</sup> Bhaktapur and Patan Campuses, by virtue of their being district Campuses should operate 2 shifts. Padma Kanya, being the only girls Campus, should also operate 2 shifts to encourage the girls/working women to take up higher education. In addition,

those Campuses identified as unitary and lead Campuses (shown with an \*) for each of the different faculties should also operate 2 shifts. The under-utilized Sano Thimi Campus should also operate 2 shifts.

Given the policy enactments relating to the phasing out of the PCL programmes from TU and their phasing in into the 10+2 system as well as the opening up of a number of Universities and the resultant decrease that would occur in both the out-of-valley students studying in the Valley Campuses as well as in the total student population studying in the Valley, there is a real possibility of the Valley Campuses operating very comfortably (accommodating optimal enrolment figures) the bachelor level courses.

The above possibility is based on the following facts :

- a. the existence of 318 secondary schools in the Valley (some 243 of which belong to the private sector), quite a few of which are capable of offering 10+2 classes to the PCL student population of the valley if they are given reasonable encouragement and incentives;
- b. the existence of a number of Campuses offering only PCL programmes (the Campuses should be persuaded to switch over to 10+2 programmes);
- c. the existence of almost 2000 secondary schools located outside Kathmandu Valley (including almost 1000 secondary schools in the private sector) quite a few of which are capable of starting 10+2 classes to absorb the PCL student population from outside the valley and
- d. the existence of Kathmandu University and setting up of other Universities that will also provide higher level courses thereby decreasing the enrolment pressure on TU.

Considering the enrolment projections that have been made, the expected growth of the 10+2 system, the optimal enrolment capacities of the existing TU Constituent Campuses, the changes associated with the introduction of the 3-year Bachelor programmes, the following three different facilities rationalization scenarios have been envisaged :

#### **Facilities Rationalization Scenario I**

All the Constituent Campuses to phase out the PCL programmes (to be assimilated by the 10+2, system) and increase the Bachelor intake as well as implement the 3-year Bachelor programme.

#### **Facilities Rationalization Scenario II**

Out of the 16 Constituent Campuses, the University to retain ownership of 12 Campuses and make available 4 Campuses to the Council for Higher Secondary Education (CHSE) for expediting the implementation of the 10+2 programme in order to accelerate the phasing out of the PCL programmes from TU, or alternatively to sell the four campuses at commercial rates in order to build an entirely new campus, to

accommodate the students and programmes that cannot be adjusted in the 12 Campuses that are retained, to renovate the Campuses that are to be retained by TU and to make funds available to accelerate the phasing out of the PCL programmes from TU.

### Facilities Rationalization Scenario III

The University to retain only 9 of the existing Constituent Campuses and build an entirely new campus or a number of new academic complexes in Kirtipur next to the Ring Road to accommodate the students and programmes that cannot be accommodated in the campuses to be retained by TU; thereby, making available seven Campus sites to CHSE to expedite the implementation of the 10+2 programme or to sell the campus sites at commercial rates in order to build a number of academic complexes in Kirtipur, renovate the existing campuses and to make available funds to expedite the phasing out of the PCL programmes from TU.

Scenario I is the one favoured by the University and campus authorities because the other two scenarios envisage sacrificing some campuses that could result in student and faculty unrest. The enrolment proposed as per Scenario I is as follows:

**Table 11.5: Proposed Enrolment, Scenario I**

SN	Campus	Programmes to be Offered	1992/92 Enrolment		Proposed Optimum Enrollment <sup>1</sup>	Remarks
			Total	Bachelor & Master's		
1	Bhaktapur	Humanities & Mgmt.	1,077	170	960	District Campus.
2	Sano Thimi	Ed., Humanities & Science	409	199	1824 <sup>2</sup>	Sc. to cater to std. of Bhaktapur dist.
3	Patan	Humanities & Mgmt.	4,304	1,568	2,304	District Campus.
4	Amrit Science	Science	2,067	542	816	
5	Lalit Kala	Fine Arts (Humanities)	253	38	168	To offer specialized short courses in fine arts.
6	Mahendra Ratna	Ed. & Humanities	2,160	1,482	1,152	
7	Nepal Commerce	Management	3664	2,017	816	
8	Nepal Law	Law	3,805	2,140	1,056	
9	Padma Kanya	Humanities & Mgmt.	5,271	1,635	3,408	
10	Public Youth	Humanities & Mgmt.	2,629	1,503	768	
11	Ratna Rajya	Humanities	5,276	1,742	1,632	
12	Saraswati	Management.	3,079	1,013	576	
13	Shanker Dev	Management.	3,707	2,477	1,248	
14	Tri-Chandra	Science	2,656	1,743	2,688	
15	Biswabhasa	Humanities	521	-	432	
16	Public Admn.	Management	396	396	192	
	Total	Humanities : 8 Management: 8 Campuses Science : 3 Campuses Education : 2 Campuses Law : 1 Campus	41,274	18,665	20,040 <sup>3</sup>	

<sup>1</sup> Proposed Optimum Enrolment is based on the optimum that can be accommodated in the existing physical facilities, cf para 2.18 in the main report.

<sup>2</sup> Sano Thimi should be utilized to a greater extent given the huge area of the Campus. It should not only offer bachelor programmes in humanities, education and science but also conduct pre-service and in-service courses on a regular basis.

<sup>3</sup> This total proposed enrolment is based on the available physical facilities of the campuses, some of which have been proposed to be used in two shifts.

The faculty-wise distribution of the enrolment proposed under Scenario I is as follows:

**Table 11.6: Proposed Faculty-Wise Enrolment Distribution, Scenario I**

SN	Campus	Proposed Faculty-wise Enrolment					Total
		Science	Humanities	Management	Law	Education	
1	Bhaktapur	-	576	384	-	-	960
2	Sano Thimi	360	984	-	-	480	1,824
3	Patan	-	1,056	1,248	-	-	2,304
4	Amrit Science	816	-	-	-	-	816
5	Lalit Kala	-	168	-	-	-	168
6	Mahendra Ratna	-	576	-	-	576	1,152
7	Nepal Commerce	-	-	816	-	-	816
8	Nepal Law	-	-	-	1,056	-	1,056
9	Padma Kanya	-	2,016	1,392	-	-	3,408
10	Public Youth	-	192	576	-	-	768
11	Ratna Rajya	-	1,632	-	-	-	1,632
12	Saraswati	-	-	576	-	-	576
13	Shanker Dev	-	-	1,248	-	-	1,248
14	Tri-Chandra	2,688	-	-	-	-	2,688
15	Bishwabhasa	-	432	-	-	-	432
16	Public Admn.	-	-	192	-	-	192
	Total	3,864	7,632	6,432	1,056	1,056	20,040
	Proposed Enrolment	3,864	7,632	6,672	1,200	672	20,040

Scenario II envisages the retention of 12 campuses and disposal of four campuses, viz. Lalit Kala Campus, Nepal Commerce Campus, Public Youth Campus and Saraswati Campus. Under this scenario, a brand new campus is to be built in Kirtipur to accommodate the students and the programmes that cannot be accommodated in the campuses that are to be retained by TU. The criteria that can be used to select the Campuses to be retained by Tribhuvan University are as follows :

- a. The demand for higher education in the districts of the Kathmandu Valley;
- b. Historical and other expedient factors underlining the need to retain the Campuses by the University;
- c. Gender and social equity factors;
- d. The excellence of specific programmes offered by the Campuses;
- e. The unique nature of the courses offered; and
- f. The adequacy of classroom facilities, the possibility of expansion and the location which will dictate both accessibility and sustainability.

Based on the criteria given above, the following Campuses will merit selection for retention by Tribhuvan University :

- a. Bhaktapur and Patan Campuses to be selected because they are district Campuses;
- b. Tri-Chandra Campus to be selected because it was the first Campus (College) to be opened in the country and Amrit Science to be selected because it was the first private science Campus that has succeeded in maintaining a record of excellence in the teaching of science;
- c. Padma Kanya Campus, the only all-girls Campus in the Valley, to be selected on the basis of gender and social equity;
- d. Shanker Dev, rated the best for Management (Commerce), Ratna Rajya, the best for Humanities, Mahendra Ratna, which caters exclusively to students of education and Nepal Law which caters exclusively to the students of law, to be selected on the basis of excellence of programmes;
- e. Public Administration Campus, Bishwabhasa and Lalit Kala to be selected on the basis of uniqueness of courses; and
- f. Sano Thimi Campus to be selected on the basis of ample scope for expansion (though it may not be preferred at present because of the distance from Kathmandu).

The enrolment proposed as per Scenario II is as follows :

Table 11.7: Prpopsed Enrolment, Scenario II

SN	Campus	Programmes to be Offered	1992/93 Enrolment		Proposed Optimum Enrollment <sup>1</sup>	Remarks
			Total	Bachelor & Master's		
1	Bhaktapur	Humanities & Management	1,077	170	960	Sano Thimi should offer a wide range of refresher courses.  Adequate scope for expansion
2	Sano Thimi	Education, Humanities & Science	409	199	1,824	
3	Patan	Humanities & Management	4,304	1,225	2,304	
4	Amrit Science	Science	2,067	461	816	
5	Mahendra Ratna	Education & Humanities	2,160	1,482	1,152	
6	Nepal Law	Law	3,805	2,140	1,056	
7	Padma Kanya	Humanities & Management	5,271	1,635	3,408	
8	Ratna Rajya	Humanities	5,276	1,742	1,632	
9	Shanker Dev	Management	3,707	2,477	1,248	
10	Tri-Chandra	Science	2,656	1,743	2,688	
11	Bishwabhasa	Languages & Fine Arts (Humanities)			432	
12	Public Administration	Public Administration (Management)	396	396	192	
	Total	Humanities : 7 Campuses Management: 5 Campuses Science : 3 Campuses Education : 2 Campuses Law : 1 Campus	31,128	13,670	17,712 <sup>2</sup>	

<sup>1</sup> These optimum enrolments are based on the existing physical facilities, cf para 2.18 in the main report.

<sup>2</sup> This total falls short of the 20,040 that is expected to be in 3 years bachelor programme. This shortfall should be provided for in a new Campus.

From the above-given table, it will be seen that the 12 Constituent Campuses will be able to accommodate 17,712 students.

The faculty-wise distribution of the enrolment proposed under Scenario II is as follows :

**Table 11.8: Proposed Faculty-Wise Enrolment Distribution, Scenario II**

SN	Campus	Proposed Faculty-wise Enrolment					Total
		Science	Humanities	Management	Law	Education	
1	Bhaktapur	-	576	384	-	-	960
2	Sano Thimi	360	984	-	-	480	1,824
3	Patan	-	1,056	1,248	-	-	2,304
4	Amrit Science	816	-	-	-	-	816
5	Mahendra Ratna	-	576	-	-	576	1,152
6	Nepal Law	-	-	-	1056	-	1,056
7	Padma Kanya	-	2,016	1,392	-	-	3,408
8	Ratna Rajya	-	1,632	-	-	-	1,632
9	Shanker Dev	-	-	1,248	-	-	1,248
10	Tri-Chandra	2,688	-	-	-	-	2,688
11	Bishwabhasa	-	432	-	-	-	432
			Language, Fine Arts				
12	Public Administration	-	-	192 Public Administration	-	-	192
	<b>Total</b>	<b>3,864</b>	<b>7,272</b>	<b>4,464</b>	<b>1056</b>	<b>1,056</b>	<b>17,712</b>
	<b>Proposed Enrolment</b>	<b>3,864</b>	<b>7,632</b>	<b>6,672</b>	<b>1200</b>	<b>672</b>	<b>20,040</b>
	<b>Required : New Campus at Kirtipur</b>	<b>-</b>	<b>360</b>	<b>2,208</b>	<b>-</b>	<b>-</b>	<b>2,568</b>

From the table given above, there is surplus provision for the Education faculty and a slight shortfall in the provision of student places in the Law faculty. A brand new Campus will be required to accommodate 360 Humanities students and 2,208 Management students. The new Campus must therefore have an enrolment capacity of 2,568.

Scenario III envisages the retention of 9 Constituent Campuses by TU and giving up seven Campuses, viz. Amrit Science, Lalit Kala, Mahendra Ratna, Nepal Commerce, Nepal Law, Public Youth and Saraswati. The criteria that can be used for selection of Campuses to be retained by TU are the criteria given in para 22. Using the same criteria, the following Campuses can be selected for retention :

- a) Bhaktapur and Patan Campuses based on the first criterion;
- b) Tri-Chandra Campus based on the second criterion (this Campus can specialize in Science);
- c) Padma Kanya Campus based on the third criterion;
- d) Shanker Dev Campus and Ratna Rajya Laxmi Campus based on the fourth criterion (Shanker Dev can specialize in Management, whilst Ratna Rajya can specialize in Humanities);

- e) Public Administration Campus, which is the only Campus offering Master's in Public Administration, and Bishwabhasa Campus based on the fifth criterion. Bishwabhasa Campus can be developed as a School of Languages & Fine Arts offering both language courses and fine arts courses (this Campus could cater to the special needs of both foreigners and Nepalese); and
- f) Sano Thimi Campus, with ample scope for expansion, based on the sixth criterion (Sano Thimi could focus on education).

The enrolment proposed as per Scenario III is as follows :

**Table 11.9: Proposed Enrolment, Scenario III**

SN	Campus	Programmes to be Offered	1992/93 Enrolment		Proposed <sup>1</sup> Optimum Enrolment	Remarks
			Total	Bachelor & Master's		
1	Bhaktapur	Humanities & Management	1,077	170	960	Sano Thimi should also offer a wide range of refresher courses.
2	Sano Thimi	Education, Humanities & Science	409	199	1,824	
3	Patan	Humanities & Management	4,304	1,225	2,304	
4	Padma Kanya	Humanities & Management	5,271	1,635	3,408	
5	Ratna Rajya	Humanities	5,276	1,742	1,632	
6	Shanker Dev	Management	3,707	2,477	1,248	
7	Tri-Chandra	Science	2,656	1,743	2,688	
8	Bishwabhasa	Languages & Fine Arts (Humanities)	-	-	432	
9	Public Administration	Public Administration (Management)	396	396	192	
	Total	Humanities : 6 Campuses Management: 5 Campuses Science : 2 Campuses	23,096	9,587	14,688	

<sup>1</sup> The proposed optimum enrolment is based on the optimum that can be accommodated in the existing physical facilities, cf. Para 2.18.

From the above table, it will be seen that 9 Constituent Campuses will be able to accommodate 14,688 students.

The faculty-wise distribution of the enrolment proposed under Scenario III is as follows:

**Table 11.10: Proposed Faculty-Wise Enrolment Distribution, Scenario III**

SN	Campus	Proposed Faculty-wise Enrolment					TOTAL
		Science	Humanities	Management	Law	Education	
1	Bhaktapur	-	576	384	-	-	960
2	Sano Thimi	768	-	-	-	1,056	1,824
3	Patan	-	1,056	1,248	-	-	2,304
4	Padma Kanya	-	2,016	1,392	-	-	3,408
5	Ratna Rajya	-	1,632	-	-	-	1,632
6	Shanker Dev	-	-	1,248	-	-	1,248
7	Tri-Chandra	2,688	-	-	-	-	2,688
8	Bishwabhasa	-	432	-	-	-	432
9	Public Administration	-	-	192 Public Administration	-	-	192
	Total	3,456	5,712	4,464	-	1,056	14,688
	Proposed Enrolment	3,864	7,632	6,672	1,200	672	20,040
	Required : New Campus in Kirtipur	408	1,920	2,208	1,200	-	5,736

From the table given above, there is surplus provision for the education faculty. A number of new academic complexes proposed to be built in Kirtipur along the Ring Road must accommodate 408 Science students, 1,920 Humanities students, 2,208 Management students and 1,200 Law students. The total enrolment capacity of the new academic complexes will work out to 5,736.

### Financial Implications of Scenario I

With decreased enrolments, the fees collected from the students would decrease proportionately. If academic environments are to be improved, it should be made mandatory for the Campuses to abide by the optimum enrolments which have been worked out on the basis of the existing physical facilities. To make up for the loss of revenue from the decreased enrolments, the TU/Campus authorities must increase the fees that are charged, which, even the students will agree, are abysmally low. This must be done in conjunction with systemic reforms, the most sensitive of which will be cutting down on the excess staff and giving the faculty members a reasonable teaching load that is, at least, at par with those existing in the other SAARC countries. Only then will the Campuses not only generate additional revenue but feel compelled to

minimize wasteful expenditure and use properly the revenue generated. By adopting sensible housekeeping measures, some money could even be saved for essential repairs and maintenance. Since this Scenario does not foresee giving up any of the Campuses, the advantages associated with giving up the Campuses (the commercial rates of the properties are so high that, if sold, the money would be available to build new and better Campuses) need not be discussed here

### Financial Implications of Scenario II

The loss of revenue from the students (because of decreased enrolments) can be made up by the measures which have already been explained in the para 29. By disposing of four campuses, viz. Lalit Kala, Nepal Commerce, Public and Saraswati Campuses, TU will have Rs. 215,835,000 (Rupees 215.835 million , that is Rs. 21.5835 crores) to build a new Campus to accommodate 2,568 students, renovate the Campuses that will be retained by TU., as well as make available a substantial amount of funds to accelerate the phasing out of the PCL programmes. The valuation of the four campuses that are to be disposed off under this Scenario is given hereunder :

**Table 11.11: Valuation of 4 Campuses to be Given up by TU as per Senarrio II**

SN	Campus	Land		Building		Total Value (Rs.'000)
		Area (In ropani)	Value <sup>1</sup> Rs.'000	Floor Area <sup>1</sup> (sq.m.)	Value <sup>1</sup> Rs.'000	
1	Lalit Kala	1-12-0-0 (0.09 hectares)	28,350	1,187	837	29,187
2	Nepal Commerce	21-0-0-0 (1.07 hectares)	43,050	4,115	10,679	53,729
3	Public Youth	8-11-1-1 (0.44 hectares)	53,984	3,062	7,623	61,607
4	Saraswati	10-14-3-3 (0.56 hectares)	65,602	1,965	5,710	71,312
	<b>Total</b>	42-6-1-0	190,986	10,329	24,849	215,835

As per Scenario II, a new Campus with an enrolment capacity of 2,568 is proposed to be built on TU land in Kirtipur along the Ring Road. If 3 sq.m. is provided per student place, the total built-up area that will be required is 7,704 sq.m. As per prevailing norm, the land requirement for the above calculated built-up area is 3 times the built-up area, which works out to 23,112 sq.m. The new Campus is expected to cost Rs. 122,794,056.00 (Rupees 122.794 million) leaving a balance of Rs.93,040,944.00 (Rs. 93.041 million) for renovating the Campuses to be retained by TU and for accelerating the phasing out of the PCL programmes.

**Table 11.12: Tentative Cost of New Campus as per Scenario II**

Construction Cost 7,704 sq.m. @ Rs 12,000/sq.m.	=	Rs. 92,448,000.00
Land Development Cost : @ 10% of Construction Cost	=	Rs. 9,244,800.00
Furniture Cost : @ 5% of Construction Cost	=	Rs. 4,622,400.00
	=	Rs. 106,315,200.00
Consultancy Fees @ 5%	=	Rs. 5,315,760.00
<b>Total</b>		<b>Rs. 111,630,960.00</b>
Contingencies & @ 10% of Total	=	Rs. 11,163,096.00
Miscellaneous		
<b>GRAND TOTAL</b>		<b>Rs. 122,794,056.00</b>

**Financial Implications of Scenario III**

In this scenario as well, there will be a loss of revenue from the students (because of decreased enrolments) which can be made up by the measures which have already been explained. By disposing of seven Campuses, viz. Amrit Science, Lalit Kala, Mahendra Ratna, Nepal Commerce, Nepal Law, Public Youth and Saraswati Campuses, TU will have Rs. 596,562,000.00 (Rupees 596.562 million, that is Rs. 59.6562 crores) to build a few more new Campuses to accommodate 5,736 students, to renovate the Campuses that will be retained by TU. as well as a substantial amount of funds to accelerate the phasing out of the PCL programmes. The valuation of the seven Campuses that are to be disposed off under this Scenario is given hereunder :

**Table 11.13: Valuation of 7 Campuses to be Given up by TU as per scenario III**

SN	CAMPUS	LAND		BUILDING		TOTAL VALUE (Rs.'000)
		Area (In ropani)	Value <sup>1</sup> Rs.'000	Floor Area <sup>1</sup> (sq.m.)	Value <sup>1</sup> Rs.'000	
1	Amrit Science	22-7-2-0 (1.43 hectares)	153,911	7,675	12,714	166,625
2	Lalit Kala	1-12-0-0 (0.09 hectares)	28,350	1,187	837	29,187
3	Mahendra Ratna	50-10-3-0 (2.58 hectares)	119,079	3,911	5,700	124,779
4	Nepal Commerce	21-0-0-0 (1.07 hectares)	43,050	4,115	10,679	53,729
5	Nepal Law	7-12-2-3 (0.40 hectares)	82,606	3,300	6,717	89,323
6	Public Youth	8-11-1-1 (0.44 hectares)	53,984	3,062	7,623	61,607
7	Saraswati	10-14-3-3 (0.56 hectares)	65,602	1,965	5,710	71,312
	<b>TOTAL</b>	<b>123-5-0-3</b>	<b>546,582</b>	<b>25,215</b>	<b>49,980</b>	<b>596,562</b>

As per Scenario III, a number of academic complexes with a total enrolment capacity of 5,736 has been proposed to be built on TU land in Kirtipur along the Ring Road. If 3sq.m. is provided per student place for the Humanities, Management and Law faculties and 6 sq.m. is provided per student place for the science students then the 1,920 students of Humanities will require a total built-up area of 5,760 sq.m. and a land area of 17,280 sq.m. (as per prevailing norm which stipulates the land area requirement to be 3 times the total built-up area), the 2,208 students of Management will require a total built-up area of 6,624 sq.m. and a land area of 19,872 sq.m.; the 1,200 students of Law will require a total built-up area of 3,600 sq.m. and a land area of 10,800 sq.m. and 408 student of science will require a total built-up area of 2,448 sq.m. and a land area of 7,344 sq.m. The new academic complexes are expected to cost Rs. 293,787,648.00 (Rupees 293.788 million) leaving a balance of Rs. 302,774,352.00 (Rupees 302.774 million) for renovating the Campuses to be retained by TU and accelerating the phasing out of the PCL programmes from TU.

**Table 11.14: Tentative Cost of Academic Complexes as per Scenario III**

<b>Construction Cost</b>		
Humanities Block : 5,760 sq.m.	@ Rs. 12,000/sq.m.	= Rs. 69,120,000.00
Management Block : 6,624 sq.m.	@ Rs. 12,000/sq.m.	= Rs. 79,488,000.00
Law Block : 3,600 sq.m.	@ Rs. 12,000/sq.m.	= Rs. 43,200,000.00
Science Block : 2,448 sq.m.	@ Rs. 12,000/sq.m.	= Rs. 29,376,000.00
		<u>Rs. 221,184,000.00</u>
Land Development Cost	@ 10% of Construction Cost	= Rs. 22,118,400.00
Furniture Cost	@ 5% of Construction Cost	= Rs. 11,059,200.00
		<u>Rs. 254,361,600.00</u>
Consultancy Fees	@ 5%	Rs. 12718080.00
<b>Total</b>		<b>= Rs. 267,079,680.00</b>
Contingencies & Miscellaneous	@ 10% of Total	= Rs. 26707968.00
<b>GRAND TOTAL</b>		<b>Rs. 293,787,648.00</b>

Implementation plans have been proposed for all three scenarios. These are given in chapter 8 of the main report.