

Report No. 65

84428

South Asia Human Development Sector

A Study on National University and Affiliated Colleges

in Bangladesh

January 2014



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Discussion Paper Series

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Acknowledgements

The team benefited significantly from consultations with the representatives from the Ministry of Education, the National University, the University Grants Commission, public and private colleges, the National Academy for Education Management (NAEM), the Nongovernment Teacher Registration and Certification Authority (NTRCA), the Bangladesh Bureau of Educational Information and Statistics (BANBEIS), and private sector entrepreneurs. Four background papers for the study were prepared by Salma Akhter and Halima Akhter (Access and Equity), Rabiul Islam and Jahidul Islam (Quality), Salahuddin Aminuzzaman and Mustari Miskat (Governnane), and Omar Al Farooque and Mujibul Kabir (Finance). The findings of the study contributed to the preparation of Skills Development Policy Note of the Bangladesh Education Sector Review 2013.

This report was written by a team composed of Yoko Nagashima and Mokhlesur Rahman (Co-Task Team Leaders), Syed Rashed Al-Zayed Josh, Subrata S. Dhar, Shinsaku Nomura, Muhammad Asahabur Rahman, and Hena Mukherjee.

This work has benefited from the generous financial support of the Education Program Development Fund. The team is grateful for the overall guidance provided by Amit Dar, and useful feedback and input from Leonie Siok Yoong Lee, former secondee at the World Bank from the Government of Singapore, and World Bank colleagues, including Hiroshi Saeki, Ayesha Vawda, Dilip Parajuli, Syeda Kashfee Ahmed, and Seo Yeon Hong. Data Analysis and Technical Assistance Limited (DATA) conducted the field work for the College Study Survey and prepared the data. This report was edited by Michelle Klink. Sandra Alborta assisted in preparing the report for final publication. The findings, interpretations, and conclusions expressed in this report are entirely those of the authors.

Acronyms and Abbreviations

BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
B.Ed	Bachelor of Education
BISE	Board of Intermediate and Secondary Education
CCDE	Center for Curriculum Development and Education
DIA	Directorate of Inspection and Audit
DSHE	Directorate of Secondary and Higher Education
FY	Fiscal Year
GoB	Government of Bangladesh
HEI	Higher Education Institution
HEMIS	Higher Education Management Information System
HEQEP	Higher Education Quality Enhancement Project
HSC	Higher Secondary Certificate
ICT	Information & Communication Technologies
IDA	International Development Association
LAN	Local Area Network
MoE	Ministry of Education
MoF	Ministry of Finance
MPO	Monthly Pay Orders
MTBF	Medium-Term Budgetary Framework
NAEM	National Academy for Education Management
NTRCA	Nongovernment Teacher Registration and Certification Authority
PSC	Public Service Commission
PFM	Public Financial Management
REN	Research and Education Network
SSC	Secondary School Certificate
TSR	Teacher-Student Ratio
UGC	University Grants Commission

Key Messages

1. This study addresses challenges faced by a major part of the higher education sector in Bangladesh - the colleges. The objectives of the study are to: a) review and analyze the college education system of Bangladesh and b) identify policy options which will guide the government as it prepares a long-term strategy to improve the quality and relevance of higher education. This report is divided into the four key areas ripe for reform: a) access and equity, b) quality and relevance, c) financing, and d) governance.

Access and Equity

2. Bangladesh remains far behind other developed countries in terms of accessing higher education. Nevertheless, the country has witnessed a sharp rise in demand for higher education during the past decade. Affiliated colleges are the largest provider of higher education absorbing the majority of students accessing higher education in Bangladesh (79%). Given that public facilities for higher education expand slowly, private initiatives are absorbing the majority of additional demand. This private provision of education is usually expensive for poor and middle income families.

3. Moreover, the current supply of tertiary education is mostly biased to the urban centers and hence keeps girls from the periphery and the disadvantaged living in the rural areas out of access. Furthermore, there is limited scope for studying science and engineering and the available options for studying these disciplines are even more urban centric and expensive. Consequently, poor and middle income families from the periphery, in most cases, end up either not accessing higher education or accessing courses which have limited market demand. Finally, the supply gap as well as inequality in accessing higher education will widen further in the near future if supply remains at the present level.

Quality and Relevance of Teaching and Learning in Colleges

4. Few college teachers have research or pedagogical training, or qualifications beyond a master's degree. Undertrained, overworked teachers performing in environments that lack infrastructure and clear promotion tracks negatively impact student performance. Another challenge facing the system is that the college curriculum is centrally developed with scant input from key stakeholders; there is a growing disconnect between what is taught in colleges and what is required by the labor market. Additionally, student performance is assessed primarily through centralized external examinations held annually which, in the past, has caused delays in the academic schedule. Moreover, there is no evidence of systematic monitoring of the performance of the assessment system which makes systemic improvement difficult. Colleges face these and many additional challenges for which strategies need to be devised if they are to deliver quality education relevant to employers and society.

Financing and Financial Management in Colleges

5. Insufficient resources are set aside for instructional quality in both government and private colleges. Because government college finances are provided and regulated by MoE via DSHE it is virtually impossible for these colleges to mobilize significant resources on their own initiative. This study reveals that government college principals operate under a process that tends to discourage any incentives to save. In contrast to government colleges, private colleges operate under a system that has greater flexibility. Finally, the current MPO approval process possesses a number of systemic loopholes.

Governance and Management of National University and Affiliated Colleges

6. This study identified a number of governance practices in colleges which require attention if they are to achieve performance potentials. Serious concerns exist with regard to the internal governance of many affiliated colleges. Existing accountability and monitoring mechanisms are weak and ineffective. Management of the whole sub-sector is severely deficient because of institutional size, complex structure, and existing NU capacity. Moreover, NU lacks the capability to carry out responsibilities such as academic supervision or provide much-needed direction and professional, technical support. For example, NU does not have a central database or publications on academic activities to support decision-making; yet, it manages nearly four-fifths of the students in the tertiary education system. Additionally, NU and its affiliated colleges suffer from an image crisis. NU needs transparent governance practices, accountable management, professional monitoring and support, adequate financial support, a shared strategic vision, and a well-formulated quality assurance framework for colleges.

POLICY OPTIONS

7. After taking the above findings into consideration, researchers identified the policy options stated below which fall into five broad areas of reform: A) strengthening the system and service delivery, B) expanding in response to market and future demands, C) improving governance and management of the college subsector, D) strengthening performance through financing methods and college-level financial reforms, and E) improving the quality of affiliated colleges.

A. Strengthening the System and Service Delivery

1. Advance the Government's vision – fully establish NU Regional Campuses, decentralize delivery of selected services, and delegate management functions.
2. Strengthen capacity of Central NU and Regional Campuses' core functions.

B. Expanding in Response to Market and Future Demands

3. Develop a strategy for how the system will respond to projected enrollment demand, especially for: a) the rural and disadvantaged/underserved regions, and b) the subject areas that have high market demand (i.e. engineering and technology).
4. Develop a phased expansion plan with incentives and assistance for opening market-relevant courses. The plan should include cost implications developed from market research of enrollment projections.

C. Improving Governance & Management of the College Subsector

5. Clarify roles and responsibilities while balancing agencies' coordination functions with their domain specializations.
6. Spearhead the development of a medium-term Strategic Plan which includes a vision and modalities to reach the vision's goals.
7. Increase autonomy for higher performing colleges to spur innovation and strengthen quality of education and management.
8. Overhaul accountability and monitoring mechanisms.
9. Strengthen management capacities through the development of a management information system to improve accountability, transparency, administration, and management.
10. Enhance internet connectivity in individual colleges in order to improve management and administration as well as to support the modernization of teaching and learning.

D. Strengthening Performance through Financing Methods and College-Level Financial Reforms

11. Increase funding for education in general and higher education sector in particular to at least 1% of GDP by FY2010 to meet the increasing demand for higher education and to improve the quality of public universities and colleges while strengthening the capacity of the sector to improve its efficiency, governance and management.
12. Pilot multiple funding approaches: a) formula, b) performance-based and c) competitive.
13. Establish various student aid financing mechanisms (i.e., scholarship, grants, and other financial aid in the short term as well as student loan schemes to be implemented in the long term).
14. Give more financial autonomy to Government colleges – as a way to encourage fund raising –while implementing strong system of checks and balances and financial auditing and measures to strengthen college-level financial management.

E. Improving the Quality of Affiliated Colleges

15. Develop a phased plan for the college-sector quality assurance framework while sensitizing and assisting individual colleges to set up voluntary quality assurance schemes.
16. Include teacher performance in the comprehensive reform initiative.
17. Allocate additional funds for the development and implementation of training programs for various levels of staff at NU and affiliated colleges. These training options may include distance learning or online accreditation courses in addition to traditional formats.

Executive Summary

INTRODUCTION

1. **A nation's utilization and creation of knowledge endeavors are globally acknowledged as the driving forces for economic development and competitiveness.** Public and private investments in institutions of higher education and research require strengthening in tandem with the development of a regulatory environment that supports national and institutional growth. In recognition of these issues, the Government of Bangladesh's first Higher Education Strategic Plan (2006-2026) proposed a long-term development plan for the higher education sector, recommending that the plan would need to be cognizant of both universities and the Bangladesh National University-affiliated colleges where the majority of post-secondary graduates are enrolled.

2. **The Strategic Plan noted a necessity to expand the sub-sector and identified the many weaknesses -- such as poor quality, weak governance and management practices, limited access, low level of research, weak planning and monitoring capacity, and inadequate funding – that plague the system.** The first initiative of the Government of Bangladesh (GoB) is an IDA-supported project - the Higher Education Quality Enhancement Project (HEQEP). The HEQEP focuses on improving the quality and relevance of university programs which are seen as the upper tier of tertiary education in Bangladesh. But, as the Higher Education Strategic Plan pointed out,

“if the largest plank in the country's higher education has to attain the prominence it deserves, then a quality shift has to be initiated, together with a renewed strategic vision about the university and a plan of action that will address all the problems mentioned above.”(Higher Education Strategic Plan;2006:53)

3. **This study, which is the second activity initiated as a result of the Strategic Plan, addresses the challenges faced by a major part of the higher education sector - the colleges - and surveys the development options available for government policy and action.**

4. **The two objectives of the college study are to: a) review and analyze the college education system of Bangladesh and b) identify policy options which will guide the Government of Bangladesh as it prepares a long-term strategy to improve the quality and relevance of this large segment of the higher education subsector.**

5. **The policy options mentioned in the study have been discussed with the relevant stakeholders including National University, representatives from colleges and UGC.** The policy options are expected to be incorporated in the presumptive strategic plan for the long-term development of the college sector. It will also inform the government, National University and the institutions as they plan the necessary reforms for revamping this important subsector.

6. **The study used multiple methods.** Methods included a) literature reviews, b) a sample questionnaire survey of 301 colleges, c) interviews and focus group discussions with key officials, several departments, and students from 15 public and five private universities, d) case studies, e) consultations with stakeholder groups, and f) analysis of available data. The survey results provided data and information on the major aspects of the system which generally suffers from a scarcity of published data in the public domain. Survey findings provided the basis for case studies which were carried out by a team of consultants in institutions located in different regions of the country¹. The case studies aimed to

¹ A brief description of the data sources is given in Annex 1.

gain an in-depth understanding of the four areas that strongly impact the higher education systems: (i) access and equity, (ii) quality and relevance, (iii) financing, and (iv) governance.

7. **The higher education system in Bangladesh is highly complex.** There are four types of higher education institutions: a) competitive public (29) and private universities (51); b) a vast number of government (239) and non-government colleges (1251) affiliated with the National University; c) one thousand two hundred fifteen (1215) affiliated with the Islamic University of which only three are public institutions; and d) various types of professional colleges, institutions and madrasas.

8. **NU is the largest higher education institution in the country and is responsible for academic control of all affiliated colleges.** Seventy-nine percent of tertiary education students are enrolled in NU's 1,490 affiliated colleges. NU's responsibilities include framing curricula, prescribing academic programs, providing training, organizing admissions, conducting examinations and conferring degrees. It is also mandated to improve the quality of teaching-learning and strengthen academic management in colleges.

9. **The majority of existing public colleges were originally established as private institutions.** In order to make the institution functional and to ensure sustainability, these private colleges underwent an elaborate procedure of "affiliation" set out in the National University Act of 1992.

10. **The college sector is governed by complex institutional arrangements that involve multiple entities and government agencies.** The NU is the principal entity designated to look after college education beyond higher secondary level. Other entities that have overlapping responsibilities for governing the college sector include various agencies under the Ministry of Education (MoE). Only the MoE, however, has the authority to initiate the process of formulating acts,² ordinances and rules concerning institutional governance of the subsector. Policy initiatives, taken at the level of subordinate entities such as UGC, NU, DSHE and the Education Boards, feed into the more formal policy-making processes at the Ministry of Education and are often uncoordinated.

11. **Colleges can be categorized into three types of financial relationships with the government:** (a) Government colleges; (b) Private colleges with MPO; and (c) Private colleges without MPO. Of these three groups, the third group has no financial relation with government and is similar to private HEIs as independent and self-sufficient in managing their finance. Most of them are high performing colleges located in urban areas such as City College, Dhaka Commerce College etc.

MAIN FINDINGS AND KEY CHALLENGES FACING THE SYSTEM

12. The main findings and key challenges facing higher education in Bangladesh are: (i) access and equity, (ii) quality and relevance, (iii) financing, and (iv) governance.

Access and Equity

13. **Bangladesh remains far behind other developed countries with respect to the percentage of the population accessing higher education.** Nevertheless, the country has witnessed a sharp rise in demand for higher education during the past decade. In 1990, the share of population aged 18 years and above accessing higher education was below 3 percent. Currently, only 4.7% the population aged 18 years and above in Bangladesh has ever accessed any education above grade 12.

14. **Affiliated colleges are the largest provider of higher education sector.** Seventy-nine per cent (79%) of students accessing higher education in Bangladesh attend affiliated colleges.

² An act, however, has to be passed by Parliament although it can be initiated by the Ministry.

15. **The cost of education has become out of reach for poor- and middle-income households.** Given that public facilities for higher education expand slowly, private initiatives are absorbing the majority of additional demand. This private provision of education is usually expensive for poor and middle-income families. The survey data show that private universities and the renowned private colleges in the metropolitan areas are the most expensive tertiary level institutions. The prohibitively high fee levels have not encouraged better access or equity. While public universities provide less expensive education compared to private ones with regard to tuition, fees, and other charges, the majority of their students are not from disadvantaged families.

16. **The current supply of tertiary education is mostly biased to the urban centers and hence keeps girls from the periphery and the disadvantaged living in the rural areas out of access.** More than 65% of the people live in rural Bangladesh, while more than 60% of tertiary education seats are available in the urban or semi urban regions. Almost every *upazila* in Bangladesh has at least one college, either public or private or both and some have more than two colleges. However, enrollment capacity in these colleges is generally small, making it necessary for students to travel to other towns. The results of the HIES 2010 study further show that marital status coupled with poverty drastically reduces opportunities for girl students to continue their education. Indigenous communities lagging behind in access to education have low school-level pass rates leading to very low college-level enrollment.

17. **There is limited scope for studying science and engineering.** In colleges as a whole, 65% of the seats are for humanities and business studies while science education is rarely available in the rural colleges. Moreover, the available options for studying science and engineering are urban centric and expensive. Consequently, poor and middle income families from the periphery, in most cases, end up either not accessing higher education or accessing courses which have limited market demand.

18. **The supply gap as well as inequality in accessing higher education will widen in the near future if supply is not increased.** The demand projection shows a sharp increase throughout the next decade and by 2030, 65% more students will try to gain admission to tertiary level institutions. In order for this demand to be absorbed, the private sector must supplement the university expansion planned by the government.³

Quality and Relevance of Teaching and Learning in Colleges

19. **There are 54,503 college teachers teaching at Higher Secondary through master's degree levels.** Little more than 20% of these teachers are female and only 4% have qualifications higher than a masters (M Phil or PhD). About 82% of the teachers are employed in the private colleges, half of whom receive their salary and allowances from the government through MPO subventions. The overall average Teacher-Student Ratio (TSR) is 1:35 with wide variations at different locations and academic programs. The ratio of students to teachers is much higher in the large institutions especially in urban and metropolitan areas.

20. **Few teachers – in the public or private college arena – have research or pedagogical training, or qualifications beyond a master's degree.** The very small proportion (4%) possessing doctoral level or M.Phil. degrees, teach largely in colleges with good physical infrastructure, academic and administrative settings. Lack of opportunities for a planned system of training and upgrading contribute to the underperformance of staff and the inability to attract better qualified staff to rural

³ In the Strategic Plan for Higher Education 2006-2026, data are presented which suggest that if 15% of high school graduates pursue higher education in 2026, at least 28 new universities will have to be established in the country. MoE's MTBF from FY 2012/13 to 2016/17 (five years) has set the target of establishing four new public universities each year with five in the terminal year of 2016/17.

colleges. Students participating in the sample survey rated the teaching skills of academic staff from 'poor' to 'average'.

21. **Poor teacher performance impacts student performance.** The variety of reasons for poor teacher performance include: Teachers tasked with non-teaching administrative and clerical chores, poor or insufficient training, poor infrastructure, teacher focus on private tuition classes and low level of motivation resulting from unattractive salary packages and unclear or non-existent career paths. The general picture suggests a sub-sector that lacks professional vibrancy; rather it suggests a stagnant group of teachers who are locked into secure jobs and see little reason to change their ways.

22. **The college curriculum is centrally developed with scant input from key stakeholders while curriculum review and renewal does not occur in a regular, systematic manner.** More importantly, there is a growing disconnect between what is taught in colleges and what is required by the labor market. Key emerging knowledge and skill areas such as gender studies, disaster management, information technology and computer applications rarely appear in college curricula. Furthermore, access to relevant and updated learning resources and logistical support in NU colleges is variable with rural colleges being worse off. With the growing number of Honors programs, poor access to resources and the limited number of postgraduate programs continue to plague the system.

23. **Student performance is assessed primarily through centralized external examinations held annually.** This is a huge undertaking where, in a single year, NU has the task of organizing 97 examinations in 382 subjects and 1,950 courses. The questions are set by public university teachers engaged by NU with examinations held on college premises. Interviews of college teachers and students identified perceptions that university teachers are not well-versed in the NU curriculum, which poses problems for question-setting as well as marking of answer scripts. Examiners engaged for external evaluation are mainly senior teachers selected from public universities. Sometimes college teachers are selected as examiners for scripts from colleges other than their own. Examiners are often unable to meet agreed deadlines for completion of the marking process, creating delays in the publication of examination results. This leads to a time-lag or 'session jam', a phenomenon which contributes greatly to wastage of resources and increasing unit costs. A positive step has been NU's introduction and implementation of online *application* facilities for admission from 2010 which in accelerating the admission process, has potential for stopping delays in the academic schedule.

24. **There is no evidence of systematic monitoring of the performance of the assessment system which makes systemic improvement difficult.** The logistics of numbers is an enormous challenge but given the examination's high stakes, MoU, DSHE, UGC and NU need to mount a public review of the assessment system. Since student examination fees constitute a major proportion of NU revenue (60%), NU's clients - students – should expect to enjoy a more efficient and effective process where examination organizers ensure the suitability of markers enlisted, the timeframe for examinations, marking of scripts and announcement of results. Part of the fees income could be utilized for training of examiners, as well as increasing the knowledge and skills of those who set examinations. Technical improvement may go some way to deal with allegations regarding administrative mismanagement.

25. **Colleges face many challenges for which strategies need to be devised if they are to deliver quality education relevant to employers and society.** These need to be resolved by national authorities and agencies and include primarily: (i) recruiting and deploying appropriately qualified college teachers, particularly in private colleges; (ii) investment in post-recruitment training and support for public and private colleges; (iii) provision of and equitable access to teaching-learning resources; (iv) establishment of a strong monitoring and professional support mechanism; and (v) a comprehensive review of NU's organization of national examinations and assessment practices, including both content and processes.

Financing and Financial Management in Colleges

26. **Bangladesh has one of the lowest GDP allocations for education in general and in higher education in particular as compared to some other developing countries. Overall allocation for education has remained almost flat between 2% - 3% of GDP between 2001 and 2009 with around 0.12% on higher education.** Considering the significant increase in the demand for tertiary education, especially for colleges in recent years, and a great need to improve the quality of government colleges, the current funding level is inadequate.
27. **Insufficient resources are set aside for instructional quality for both government and private colleges.** NU income sources are largely based on the various categories of fees charged to students and institutions. The bulk of expenditure is for salaries and examination-related expenses while expenditures for research, curriculum development and other academic work were 3% or less.
28. **Government college finances are provided and regulated by MoE via DSHE.** While NU provides curriculum and academic support, and intermittent training of academic/teaching staff, MoE/DSHE gives financial support for both recurrent and development expenditures of colleges. Budgets submitted by government colleges are approved on the basis of staffs and precedence, not per capita averages by fields of study. Resource allocation is linked to the development and non-development funding requirements drafted by the Ministry under MTBF priorities.
29. **Government colleges are unable to mobilize significant resources on their own initiative.** Unlike autonomous public universities, government colleges cannot raise funds from sale of goods and services, donation and/or other fund raising activities due to stringent government regulations. In fact, the lion's share of income for government colleges comes from government budget allocations while 20% comes from student tuition and fees. Student fees in public colleges are very low and a majority of them go to National University.
30. **Government college principals operate under a process that tends to discourage any incentives to save.** College principles are not allowed to transfer funds across categories, are unable to raise funds, and have to return any savings to the exchequer – a process that sets the stage for inefficient resource management.
31. **In contrast to government colleges, private colleges operate under a system that has greater flexibility.** Private MPO listed colleges are autonomous with respect to financial management providing a high level of independence in internal administration, fund raising and speedier decision making. Government MPO grants constitute about 20% of income for private colleges while student tuition fees constitute more than 80% of total income. Government subventions finance 100% of the basic salary of the approved teaching (significant numbers are not covered) and support staff posts in recognized private colleges.
32. **The current MPO approval process possesses a number of systemic loopholes.** Discrepancies within the system may go by unheeded as better coordination among main players is needed. Information gaps may often lead to misuse of MPO subventions. Unfortunately, the structure allows for a chain of corruption; a minimal proportion (around 2%) of the colleges tends to have suspensions of MPOs due to poor academic performance.

Governance and Management of National University and Affiliated Colleges

33. **The main governance functions of the National University – vis-à-vis the affiliated colleges – are related to affiliation, admission, examinations, curriculum management and teacher recruitment and development.** As a whole, the National University system accounts for roughly 80 percent of the whole tertiary sector of the country.

34. **As a public university, the governance structure and system of NU revolves around Vice Chancellor.** The Vice Chancellor is the chief executive, Pro-Vice Chancellor, the Senate, the Syndicate, the Academic Council, the Finance Committee and the Planning and Development Committee. The Vice-Chancellor is empowered to appoint teachers (excepting professors), officers and employees on a temporary basis ordinarily for a period of not more than six months and s/he must inform the Syndicate about such appointments.⁴

35. **Public colleges are administered through the government service rules while affiliated private colleges are governed by their Governing Bodies.** Teachers are recruited through Public Service Commission and their salaries follow the government salary scale. Administrative decisions are mostly taken by the Government through the Ministry of Education (MoE) and the Directorate of Secondary and Higher Education (DSHE) under the MoE. In private colleges, teacher recruitment committees have representation from NU and DSHE and teachers are recruited from a pool that is pre-certified by the Nongovernment Teacher Registration and Certification Authority (NTRCA).

36. **Affiliation eligibility is subject to: a) satisfying certain conditions and b) approval of the Syndicate.** These conditions include: a) a Governing Body; b) strength and qualifications of teaching staff; c) suitable⁵ facilities; d) financial resources to provide for continued maintenance; e) absence of any other affiliated college within a radius of eight kilometers except in the metropolitan, industrial and municipal areas, and f) function for at least three years and receive salary subvention for teachers from the Government. 6

37. **Teachers experience uncertainty when colleges are expected to pay teachers from their own tuition and other income, unless they work in big urban colleges where tuition and other income of the colleges are guaranteed.** While the National University sets the requirements for affiliation regarding the number of teachers required in each subject for colleges seeking affiliation, it does not have the responsibility to provide financial support to the colleges once affiliated⁷.

38. **The study identified a number of governance practices in colleges which require attention if they are to achieve their performance potentials.** These include: (i) the structure which makes government colleges replicas of government entities preventing them from enjoying some working/functional autonomy; (ii) the acute shortage of teachers due to laborious and inefficient teacher recruitment practices; (iii) issues regarding the internal governance of many affiliated private colleges; (iv) adverse effects of student politics on college governance; (v) weak accountability and monitoring mechanism; and (vi) overall lack of strategic vision and planning at affiliated colleges.

⁴ This power, in the past, allegedly was the source of many malpractices. The University is still suffering from the effect of irregularities in appointments.

⁵ Other than the space, there is no such given criterion which qualifies “suitable”.

⁶ National University Amended Regulations on Affiliation, 2012, approved by Syndicate on June 19, 2010.

⁷ The private colleges are supposed to be financially self-sufficient but most of them cannot charge high tuition fee and are dependent on MPO to remain financially viable.

39. **Serious concerns exist with regard to the internal governance of many affiliated colleges.** The case studies identified the functioning of Governing Bodies and the impact of politically influential persons on the management of colleges including the recruitment of teachers as areas of concern. Equally adverse is the effect of student politics on college governance, particularly in terms of administration of examinations and actual number of class days.

40. **Existing accountability and monitoring mechanisms are weak and ineffective, given the size and complex structure of affiliated colleges and the current capacity of the NU.** Management of the whole sub-sector is severely deficient because of institutional size, complex structure, and existing NU capacity. NU lacks capability to carry out responsibilities such as academic supervision or provide much-needed direction and professional, technical support. NU has taken the initiative to delegate its activities to six regional offices. However, staff deployment and capacity building for these regional offices have hindered implementation progress, laying the ground for weak management. Moreover a lack of consultative processes in the decision-making process with its chief clients, the affiliated colleges, has created an unhealthy distance between central management and the colleges.

41. **NU and its affiliated colleges suffer from an image crisis.** The recent spell of employees' strike at NU, annulment of the appointment of some 1100 employees on the ground of anomalies in employment, blatant political considerations in many administrative decisions and numerous problems of irregularities of various kinds at the colleges have created an image crisis for the National University system. Moreover, college education is always considered second grade, in the court of public opinion, next to university education at tertiary level.

42. **NU needs transparent governance practices, accountable management, professional monitoring and support, a shared strategic vision and a well-formulated quality assurance framework for colleges, with adequate financial support.**

43. **NU does not have a central database, or published annual report, to support decision-making; yet, it manages nearly four-fifths of the students in the tertiary education system.** Data on examinations, admission, affiliation/de-affiliation, curricula are all to be found at different locations.

POLICY OPTIONS

44. **The National University and its 1,490 public and private colleges requires a phased multidimensional and multilayered policy development approach to chart out a strategic path for improving the coordination among the key players – MoE, NU, UGC, DSHE and representatives of public and private colleges.**

45. **The policy options fall into five broad areas of reform: A) strengthening the system and service delivery, B) expanding in response to market and future demands, C) improving governance and management of the college subsector, D) strengthening performance through financing reforms, and E) improving the quality of affiliated colleges.**

A. Strengthening the System and Service Delivery

1. Advance the Government's vision – fully establish NU Regional Campuses, decentralize delivery of selected services, and delegate management functions.
2. Strengthen capacity of Central NU and Regional Campuses' core functions.

B. Expanding in Response to Market and Future Demands

3. Develop a strategy for how the system will respond to projected enrollment demand, especially for:
a) the rural and disadvantaged/underserved regions, and b) the subject areas that have high market demand (i.e. engineering and technology).
4. Develop a phased expansion plan with incentives and assistance for opening market-relevant courses. The plan should include cost implications developed from market research of enrollment projections.

C. Improving Governance & Management of the College Subsector

5. Clarify roles and responsibilities while balancing agencies' coordination functions with their domain specializations.
6. Spearhead the development of a medium-term Strategic Plan which includes a vision and modalities to reach the vision's goals.
7. Increase autonomy for higher performing colleges to spur innovation and strengthen quality of education and management.
8. Overhaul accountability and monitoring mechanisms.
9. Strengthen management capacities through the development of a management information system to improve accountability, transparency, administration, and management.
10. Enhance internet connectivity in individual colleges in order to improve management and administration as well as to support the modernization of teaching and learning.

D. Strengthening Performance through New Financing Methods and College-Level Financial Reforms

11. Increase funding for education in general and higher education sector in particular to at least 1% of GDP by FY2015 to meet the increasing demand for higher education and to improve the quality of public universities and colleges while strengthening the capacity of the sector to improve its efficiency, governance and management.
12. Pilot multiple funding approaches: a) formula, b) performance-based and c) competitive.
13. Establish short- and long-term student aid financing mechanisms (i.e., scholarship, grants, and other financial aid as well as a student loan scheme to be implemented in the long-term) to increase equity and access.
14. Give more financial autonomy to Government colleges – as a way to encourage fund raising –while implementing strong system of checks and balances and financial auditing and measures to strengthen college-level financial management.

E. Improving the Quality of Affiliated Colleges

15. Develop a phased plan for the college-sector quality assurance framework while sensitizing and assisting individual colleges to set up voluntary quality assurance schemes.
16. Include teacher performance in the comprehensive reform initiative.
17. Allocate additional funds for the development and implementation of training programs for various levels of staff at NU and affiliated colleges. These training options may include distance learning or online accreditation courses in addition to traditional formats.

1. Introduction

1. **In the contemporary world, knowledge has become the main driving force for economic development and competitiveness for the nations and university is the institution where new knowledge is created.** It is now widely agreed that knowledge has become the single most important catalyst for sustained economic growth. Industrialized and so-called developed countries had identified this fact much earlier. Developing countries took time to react to the fact, mostly because of the narrow economic analysis that showed that investment in higher education brings meager returns compared to investment in primary and secondary education. As a result, developing countries which are weakly connected to the rapidly emerging global knowledge systems finding themselves increasingly in at a disadvantage. Moreover, inequality within the country rises as some individuals and groups use their education to access high standard knowledge that makes them superior compared to those who cannot access the new wealth – knowledge (The Task Force on Higher Education and Society, World Bank 2000).

2. **The critical importance of tertiary education for achieving rapid and higher rate of growth has been recognized by the government of Bangladesh and it has initiated efforts to strengthen its higher education system.** In the context, the Government has developed a long term strategic plan for higher education: 2006-2026 (see Box 1). IDA supported the drafting of the strategic plan and is currently supporting the Higher Education Quality Enhancement Project (HEQEP) (2009-2015) which targets improvement of quality of education in universities, establish a high performance REN and strengthen their institutional capacity including the University Grants Commission of Bangladesh.

Box 1: Strategic Plan for Higher education in Bangladesh 2006-2026

The Strategic Plan for Higher Education in Bangladesh was prepared under the leadership of and active initiative of the Honorable Minister of Education. A Strategic Planning Committee (SPC) with 17 representatives of different key stakeholders developed an overall vision and recommended options for developing a strategic direction and intervention packages. Six expert groups composed of eminent scholars, academics and researchers drafted following sections of the Strategic Plan: (i) Vision, Size and Shape; (ii) Quality; (iii) Governance and Management; (iv) Future Funding; (v) Research; and (vi) Information Communication Technology. The recommendations were then discussed at the divisional headquarters and the opinions of different stakeholders were incorporated in the Plan, before reviewed by an International Advisory Group.

Some of the key recommendations are:

- University sector should be expanded to accommodate the increased demands of high school graduates and emphasis should be given on production of skilled manpower in the selected fields such as agriculture, bio-technology, livestock and fisheries, textile eng;
- Public funds should be increased in order to increase access and improve quality while exploring other sources of funds;
- Accountability and institutional autonomy should be redefined; and
- Accreditation Council for public and private universities should be set up to ensure quality education in higher education.

Source: Strategic Plan for Higher education in Bangladesh 2006-2026, UGC

3. **National University and its affiliated colleges, however, are not part of the ongoing project in view of the fact that its management structure, institutional set up and the development needs are quite different from the universities.** The National University college system is a complex and unknown universe of nearly fifteen hundred institutions of varying size and character and are spread all over the country. Its unique features demand a separate approach to understand its complicated nature and tackle its development challenges. This study, therefore, is a first attempt towards that difficult endeavor. Absence of reliable data and information on this sub-sector is a major impediment for drawing a clear picture and it is expected that this study would provide a preliminary base for further enquiries and lead to the preparation of a development project, paving the way for international funding assistance in future, if it is sought by the government.

1.1. Objective of the Study

4. **The overall objective of the college study is to (i) review and analyze the college education system of Bangladesh; (ii) indicate key policy options; (iii) propose an action matrix for its development; and (iv) provide support to the Government of Bangladesh as it prepares a long-term strategy for improving quality and relevance of this large segment of the higher education subsector.** The policy options mentioned in the study have been discussed with the relevant stakeholders and expected to be incorporated into the presumptive strategic plan for the long term development of college sector. It will also inform the government, National University and the institutions as they look into the necessary reforms for revamping this important subsector.

5. **It should be clarified at the outset that while the colleges in Bangladesh also offer higher secondary education, this study covers only those colleges, that offer bachelor's and master's degrees.**

6. **The study presents an in-depth analysis of the four main areas of college education that broadly makes up the system.** The report starts with a brief description of the higher education sector of Bangladesh, followed by (i) access and equity; (ii) quality and relevance of curriculum and teaching; (iii) financing and (iv) structure and governance. Although laid out sequentially in that order these are not mutually exclusive subjects but are dependent variables that work together to keep the institution functioning. Chapter 7 is a separate section presenting the recommendations and policy options.

1.2. Methodology

7. **The methodology for the study included relevant literature review, data and information on the major aspects of the system collected through a sample survey of 301 colleges, interviews and focus group discussions with key officials, consultations with stakeholder groups and use of available data on higher education and colleges from the concerned institutions (see Annex 1 for key data sources).** In addition several departments and students of 15 public and five private universities were also surveyed and interviewed for making a comparison with college education system. Several rounds of the Household Income and Expenditure Surveys (HIES), which is a household based nationally representative survey conducted by Bangladesh Bureau of Statistics (BBS) every five years, are also used. Findings and analyses of the sample survey data provided the basis for case studies carried out by a team of consultants in institutions located at different regions of the country⁸.

⁸ A brief description of the data sources is given in the Annex 1.

2. Higher Education in Bangladesh: Universities and Colleges

8. **Education in Bangladesh has three major stages: a) primary, b) secondary and c) higher education.** Primary education is a five-year cycle while secondary lasts seven years with three sub-stages: a) three years of junior secondary, b) two years of secondary and c) two years of higher secondary. The entry age for primary is six years. The junior, secondary and higher secondary stages are for age groups 11-13, 14-15 and 16-17 years, respectively. Higher secondary is followed by undergraduate level higher education in general, technical, engineering, agriculture, and business studies while medical streams require 5-6 years to obtain four years of undergraduate degree (details in Annex 2).

2.1. Structure of Higher Education

9. **The higher education system in Bangladesh is complex.** Currently two parallel systems of higher education exist in Bangladesh: (i) highly competitive universities in the public and private sectors and (ii) a vast number of government and non-government colleges affiliated with the National University. In addition, there are various types of professional colleges, institutions, and madrasas that also provide tertiary level education.

10. **The main difference between the colleges and universities is in the institutional and academic management structures.** While universities enjoy considerable freedom in terms of institutional and academic affairs, and management, the public colleges function as typical government organizations bound with rigid administrative and financial regulations that are common to all government offices and are sternly governed by the central authority in Dhaka. The private colleges, however, possess some administrative autonomy compared to government colleges though they still have to follow government financial management rules.

11. **Another major difference between colleges and universities relates to the qualification and skill levels of teachers.** In general, university faculties possess much higher qualifications while the public college teachers, who have lower qualifications, are recruited as public servants by the Public Service Commission (PSC). Private colleges recruit graduates certified by the National Teachers Registration and Certification Authority (NTRCA). The faculties of universities do not normally take NTRCA examination and apply for jobs in private colleges because of unattractive salary and lack of other benefits.

12. **The twenty-nine public universities in Bangladesh include ‘general’ or comprehensive universities which offer a range of disciplines.** Some of these universities focus on single professions such as medicine and engineering or are linked with specific industries such as leather, ceramics or textile. Additionally, one university has been established for armed forces professional education and training to army, navy and air force officers. One university provides distance education in a range of subjects and academic programs from secondary to the master’s level. All public universities offer M Phil and PhD programs.

13. **The overwhelming majority of the 51 private universities can be included in the ‘comprehensive’ type mentioned above.** In response to market demands, most of them started with business studies programs and later expanded to include computer science and engineering. A few offer programs in agriculture, medicine, engineering, electronics, textile technology, development studies, fine and performing arts and fashion designing. None of the private universities have M Phil and PhD programs.

14. **The colleges affiliated with National University offer bachelor pass courses (three-year degree courses), bachelor honors courses (four-year degree courses) and master's programs in subjects covered by the general universities and in some technical subjects.** Additionally, there are 1,215 graduate and master's degree equivalent Islamic religious education institutions provided by Madrasah and affiliated with the Islamic University. Among these only three are in public sector.⁹

15. **Degrees in higher education, excluding medical and engineering, are given in a three-year pass course or a four-year honors course for the bachelor's degree graduates, followed by a two-year master's course for pass graduates and one-year master's course for honors graduates.** Three year pass courses are only offered by the affiliated colleges¹⁰. To earn a bachelor's degree in medical and engineering subjects the completion of a four-year program is required. Master's program in engineering is of one and half years' duration and in medical sciences it varies from three to five years in different disciplines. One public university¹¹ only enrolls students who graduated from the polytechnic institutes.

16. **The table 1 below shows the number of institutions, enrollment and teachers in the sector in 2010.**

Table 1: Institutions, Enrollment and Teachers in Higher Education in Bangladesh, 2010

Institution	Number of Institutions	Number of Students		% of Girls	Number of Teachers		% of women	% of Total Students
		Total	Girls		Total	Women		
Public university*	29	179,097	50,519	28.20	9545	1808	18.94	7.36
Private university	51	220,752	54,740	24.79	9684	1904	19.66	9.08
Total universities	80	399,849	105,259	26.32	19,229	3712	19.30	16.44
National University								
Public college	239	881,015	352,516	40.00	9708	2256	23.23	36.24
Private college	1251	1,044,515	479,634	45.91	44,795	8975	20.03	42.97
Total colleges	1490	1,925,530	835,150	43.37	54,503	11,231	20.6	79.21
Bangladesh Open University		105,349*						4.33
Total Higher Education		2,430,728	940,409	40.44	73,732	14,943	20.26	100.00

* Only in graduate programs.

Source: University Grants Commission of Bangladesh (UGC), Annual Report, 2011; Bangladesh Bureau of Educational Information & Statistics (BANBEIS), Bangladesh Education Statistics, 2011.

⁹ Madrasah education is not covered in this study.

¹⁰ Some specialized courses are not provided by colleges such as pharmacy, micro-biology, applied subjects such as, applied statistics, applied chemistry, etc.

¹¹ Dhaka University of Engineering & Technology (DUET) is located 30 km north of Dhaka city.

17. **The NU is the largest higher education institution in the country, several times larger than all the public and private universities combined in terms of enrollment.** As evident from table 1, 79% of the tertiary education students are enrolled in 1,490 colleges affiliated with the National University.

18. **The overwhelming share of colleges providing higher education underscores the enormous and important contribution they make to the sector.** The total number of graduates from the 80 universities, 1,490 colleges and BOU in 2010 was 241,280.¹² Of these, the share of NU and BOU was 195,725, i.e., 81%.

Table 2: College Education System in Bangladesh 2010

Year	Management	Schools & Colleges (up to HSC level)		Degree (Pass) Colleges		Honors Colleges		Master's Colleges		All Colleges		Only Tertiary Education Colleges	
		Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls	Total	Girls
2010													
	Public	17	10	117	28	58	17	64	12	256	67	239	57
	Private	1817	322	1153	188	68	18	30	7	3068	535	1251	213
	Total	1834	332	1270	216	126	35	94	19	3324	602	1490	270

Source: *Bangladesh Education Statistics 2010, August 2011, BANBEIS*

19. **Despite the government's stated policy for detaching the secondary education section from the colleges providing higher education in phases, most of the colleges still have higher secondary section within the institutions.** This was a legacy from the British colonial period in the 19th century when higher secondary education providing institutions were named as colleges which later added graduate programs but continued to keep the higher secondary part within its institutional set up. It adds complexity to the governance structure¹³. However, these institutions are reluctant to remove the secondary education section apprehending financial loss because enrollment in higher secondary classes is escalating rapidly over the last several years as a result of increased pass rates of secondary school final examination.¹⁴

20. **Only 126 among 1490 institutions offer bachelor honors programs.** Table 3 shows the number of teachers and students by management, sex and the teacher-student ratio in these colleges.

¹² UGC Annual Report, 2011

¹³ Secondary education is looked after by the 10 education boards in three streams of education, e. g., general, technical and madrasah.. While the education boards handle the examinations of the higher secondary part, National University is in charge of governance, academic programs, admission, curriculum and examination of tertiary level. Despite of the existing regulation issued by secondary education boards to have separate governing body for the HSC colleges, most colleges with HSC section set up a single governing body which functions under the NU regulations. In such governing boards two representatives from DSHE and Secondary Education Boards respectively are included to take care of the management issues of the HSC section.

¹⁴ Pass rates in both SSC and HSC examinations have increased gradually over the past five years.

Table 3: Tertiary Education Colleges in Bangladesh Number of Teachers and Students by Management and sex, 2010

Type of College	Management	Number Of Colleges	Teachers			Students			Teacher per College	Student per College	Teacher -Student Ratio
			Total	Female	%	Total	Girls	%			
Degree (Pass)	Private	1153	40151	7509	18.7	855859	403272	47.12	35	742	1:21
	Public	117	2400	384	16	147155	77098	52.39	21	1258	1:61
Degree (Honors)	Private	68	2718	812	29.87	102170	39925	39.08	40	1503	1:38
	Public	58	2317	499	21.54	234533	98012	41.79	40	4044	1:101
Masters	Private	30	1926	635	32.97	86486	36437	42.13	64	2883	1:45
	Public	64	4991	1373	27.51	499327	177406	35.53	78	7802	1:100
Total		1490	54503	11212	20.57	1925530	832150	43.21	Average TSR		1:35

Source: *Bangladesh Education Statistics 2010, BANBEIS*

2.2. Genesis of National University and Affiliated Colleges in Bangladesh

21. **The National University (NU) was established in 1992 under an Act of Parliament taking over affiliating functions of the universities of Dhaka, Rajshahi and Chittagong with features distinct from those of the traditional universities of the country as an affiliating university¹⁵.** The NU is responsible for academic control of all the affiliated colleges¹⁶ offering traditional Bachelors courses (known as Pass courses), and Honors and Master's courses except the colleges for agriculture, engineering and medicine. The university is also responsible for conducting Bachelors and Master's examinations. NU's responsibilities include framing of curricula, prescribing academic programs, providing training, organizing admission, conducting examinations and conferring degrees. It is also mandated to improve the quality of teaching-learning and strengthen academic management in colleges. Lately, admission to Honors courses in all colleges, public and private, has been centralized under the NU to systematize admission, bringing it under a centralized student data base, and to ward off undue local influences in admission.

22. **The NU is expected to play the most significant role in providing opportunities of higher education to the students living especially in rural and semi-urban areas.** From 2010 NU has established six regional centers with a view to decentralize some of its functions. However these regional centers are yet to fully functional. Currently NU has a total of 714 staff.

23. **Majority of the present public colleges were established originally as private institutions.** In order to make the institution functional and to ensure sustainability, these private colleges underwent an elaborate procedure of "affiliation" set out in the National University Act of 1992. When an institution established through private initiative becomes affiliated to the National University by fulfilling the criteria, it can function legally as a college. Over the years, many of these private colleges were brought under state's jurisdiction by specific government orders, generally known as "nationalization".

¹⁵ The NU is different from other public universities because it is a non-teaching institution. NU only develops the curricula and holds examinations but does not provide any direct assistance in carrying out of the academic programs by the colleges.

¹⁶ As per the National University Act "affiliated college" means any Graduate, Honors and Post Graduate degree college recognized by, and affiliated to the University in accordance with the provisions of the Act, the Statutes and the Regulations; while "constituent college" means any college recognized as such by the University in accordance with the provisions of this Act, the Statutes and the University Regulations;

2.3. Institutional Arrangements of College Education System

24. **The complex institutional arrangements comprise a number of entities and government agencies, directly or indirectly involved in the governance of the college sector.** The NU is the principal entity designated to look after college education beyond higher secondary level and others are the various agencies under the Ministry of Education (MoE) [i.e. Directorate of Secondary and Higher Education (DSHE), National Academy for Education Management (NAEM), Nongovernment Teacher Registration and Certification Authority (NTRCA), and Bangladesh Bureau of Educational Information and Statistics (BANBEIS)], University Grants Commission, and Public Service Commission (PSC)]. These agencies have overlapping responsibilities for the six areas of college education governance (i.e. policy processes, regulatory role, systemic reforms under development projects, personnel recruitment and training, curriculum development and quality control – see table 4). According to the Rules of Business of the Republic, policy making is the sole prerogative of MoE. Only MoE has the authority to initiate the process of making acts,¹⁷ ordinances and rules concerning institutional governance of the sub sector. However, the MoE, being the apex body in post-primary education, gleans its policy impetus from actions and experiences of its subordinate entities such as (i) the University Grants Commission for overall directions in tertiary education, (ii) the NU for specific experiences with colleges, (iii) the DSHE for residual overlaps on issues like subvention and construction in colleges, and (iv) the Education Boards on issues like governing bodies for colleges.

Table 4: Institutional Matrix of College Education Governance in Bangladesh

Agency	Policy making		Development Projects		Personnel (Recruitment & Training)		Regulatory Role		Curricula Development		Quality control	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
MOE	√	√	√	√	√	√	√	√			√	√
UGC	√	√					√	√				
NU	√	√			√	√	√	√	√	√	√	√
DSHE	√	√	√	√	√	√	√	√			√	
Board	√	√					√	√			√	
NAEM					√							
NTRCA		√				√		√				√

Source: College Survey 2010

25. **Multifaceted and perplexing policy initiatives which are often not well-coordinated.** Policy initiatives are often taken at the level of subordinate entities based on their most direct experiences with evolution of the tertiary subsector which then feed into the more formal policy making processes at the

¹⁷ An act, however, has to be passed by Parliament although it can be initiated by the Ministry.

Ministry. Some of them are formalized in the forms of acts, ordinances, rules and regulations, resolutions, office memorandum and orders. However, these entities also issue numerous circulars, office orders and memos and operate on the basis of these directives. Although they are not formal policy decisions endorsed by the Ministry or by Parliament, these directives are binding for the colleges unless they are challenged in the courts of justice. The authority to issue such circulars or orders is derived from the original Act that established the entity. Since these entities work independently, coordination is less than satisfactory being *ad hoc* rather than systematic, leaving much room for improvement in college education governance (see Box 2).

Box 2: Examples of Multifaceted and perplexing policy initiatives

Constitution of the Governing Body - The Dhaka Board of Intermediate and Secondary Education (BISE, Dhaka), deriving its authority from Section 39 of the Intermediate and Secondary Education Ordinance of 1961, issued a circular on June 8, 2009 on the constitution of the Governing Body of nongovernment higher secondary colleges. Similarly, the National University, deriving its authority from Section 45 of the National University Act of 1992, issued another circular on constitution of the Governing Body of colleges offering post-higher secondary education. The compositions of the Governing Bodies as postulated in these two circulars are different. Among the sample of 301 colleges surveyed under this study, 299 colleges offer higher secondary education and 298 colleges also offer post-higher higher secondary education. It is not clear from the circulars of BISE Dhaka and the National University as to which circular would prevail, from the legal point of view, for the 298 colleges which offer both higher secondary and post-higher secondary education.

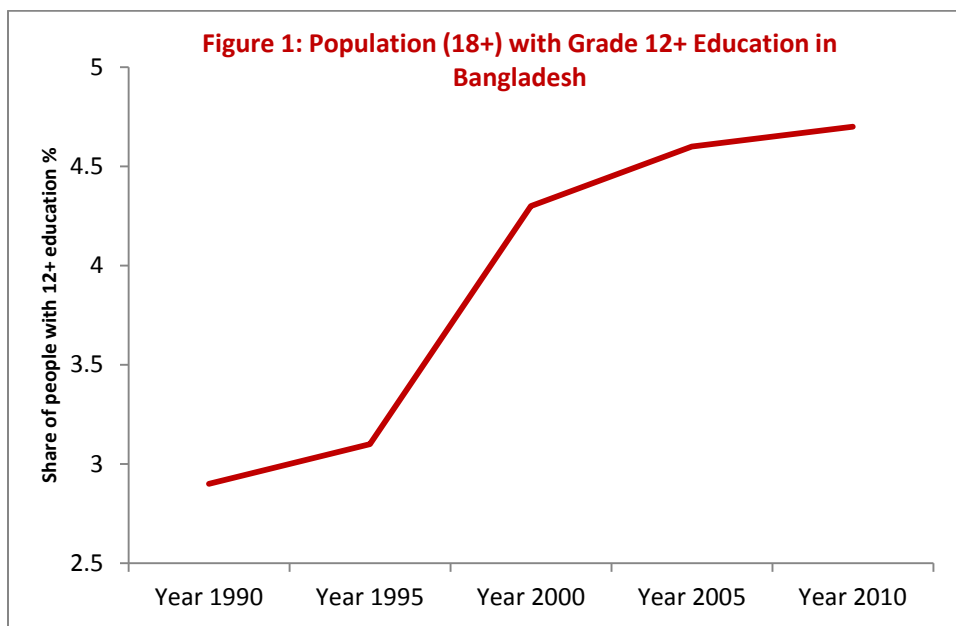
Teacher qualification and teacher training – The NTRCA is expected to check the basic acceptable criteria and pre-qualifications before it allows someone to sit for registration and certification tests. These criteria and pre-qualifications for the teachers of higher secondary and post-higher secondary colleges are different. Which set should NTRCA follow given the fact that it would not know whether a particular teacher, once certified, would join a HS college or a post-HS college? Once teachers are recruited, there is no clear line of demarcation as to who teach at HS section and who at post-HS section. Besides, many higher secondary colleges later transform into post-higher secondary colleges piggy-backing teachers from the past. Similarly, because of duplication of functions between NAEM and the National University on teacher training, NAEM attends mainly to the training of teachers of government colleges. This has resulted in some discussion about reconstitution of NAEM under a different name and with more authority.

Source: BISE, NU, NTRCA, and NAEM.

3. Access and Equity in Higher Education in Bangladesh: How National University and Affiliated Colleges Contribute

3.1. Where does Bangladesh stand in terms of Access to Higher Education?

26. **Bangladesh starts from a very low base in terms of access to higher education. Nevertheless, the country has witnessed a sharp rise in demand for higher education during the past 20 years.** In 1990, the share of the population aged 18 years and above in higher education was below 3 percent. By the year 2000 this rate reached to about 4.3 percent and 4.7 percent in 2010 (Figure 1). This significant increase in the last 20 years indicates a substantial surge in demand for higher education by the new generation. In terms of tertiary enrollments, the GER¹⁸ was only 5% in 2005 and has increased to about 8% by 2010 (HIES 2005 and 2010).



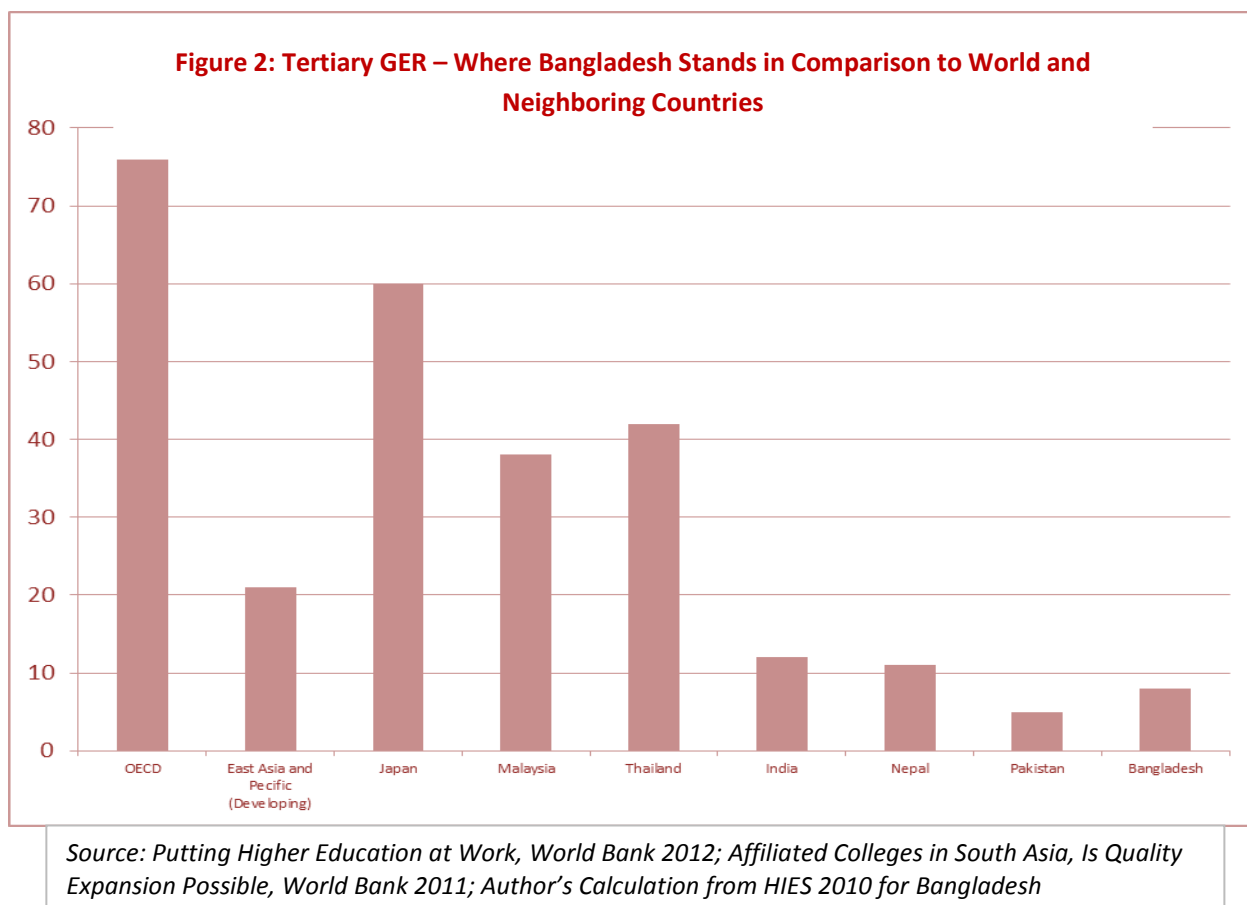
Source: HIES 1990, 1995, 2000, 2005, 2010

27. **Responding to the substantial surge in demand for higher education, both the public and private university sectors have expanded in recent years.** In only six years from 2000 to 2006, the number of private universities increased from 16 to 51¹⁹. The total number of public universities is currently 29²⁰ (2010). Four of the erstwhile Institutes of Technologies, known as Bangladesh Institutes of Technology (BIT), have been upgraded to universities in 2003. The Jagannath college, the second oldest, and the largest college, which was established in 1884 after Dhaka college (in 1841), was made into a university in 2005. There was not a single private university in Bangladesh before 1992. Currently, more than half of university level students are enrolled in private universities.

¹⁸ Gross Enrollment Ratio is $[GER=(\text{Total Enrolment in Higher Education} \times 100) / \text{Total Population between 17-24 age bracket}]$.

¹⁹ The number stands at 54 in 2012. Eight new private universities have received government's approval in 2012 but they are yet to begin academic programs.

²⁰ Excluding National University and Open University.



28. **However, the country still falls short of the global level of participation in higher education (Figure 2).** Though Bangladesh has recognized education as a priority, it has made insufficient investment in higher education²¹ compared to primary and secondary education. This low investment in higher education has resulted in Bangladesh being a low-capacity country in terms of its ability to compete in the knowledge-driven global economy.

3.2. What is the Share of Colleges that Provide Higher Education in Bangladesh?

29. **Affiliated colleges are playing an increasingly important role in producing significantly more graduates compared to all other higher education providers.** A total of 1.9 million (nearly 79% of the tertiary level) students in Bangladesh study in colleges affiliated with the NU (BANBEIS 2011). According to HIES 2010, among the 18 years plus population who have education above 12th grade, about 68% received their education from the affiliated colleges.

30. **Although the public sector plays a dominant role in the provision of tertiary education, private sector institutions are playing an increasingly important role in the rapid GER increase.** About 84% of the colleges are privately owned and managed. Public colleges serve about 46% of the students. However, more than half of the private colleges receive direct support from the government mainly in terms of salary subventions, commonly known as Monthly Pay Order (MPO). This means the government is still the biggest financier of colleges.

²¹ Higher education or tertiary level education throughout this report refer to – grade 12 plus education except technical/nursing or any other diploma education.

3.3. Who are the Students?

31. **Forty-three percent of the 1.9 million students in Bangladesh colleges are girls.** There is little information available on the socio-economic background of students. Stakeholder consultations suggest that students in colleges are (i) mostly from the rural part of the country; (ii) from the low- and middle-income families; and (iii) weak in terms of past academic achievement.

32. **In comparison to students who attend rural non-government colleges, the many students in the urban public and private colleges are not from low-income families (see Table 5).**

Table 5: Share of students in each income group by type of institution

	Taka 100000+	Taka 50000+	Taka 20000+	Taka 10000+	Less than Taka 10000
Public Universities	21	34	28	8	9
Private Universities	42	39	19	0	0
Rural Govt. Colleges	2	8	69	10	11
Rural Non-Govt. Colleges	1	4	42	41	12
Urban Govt. Colleges	19	38	31	12	0
Urban Non-Govt Colleges	22	41	36	1	0

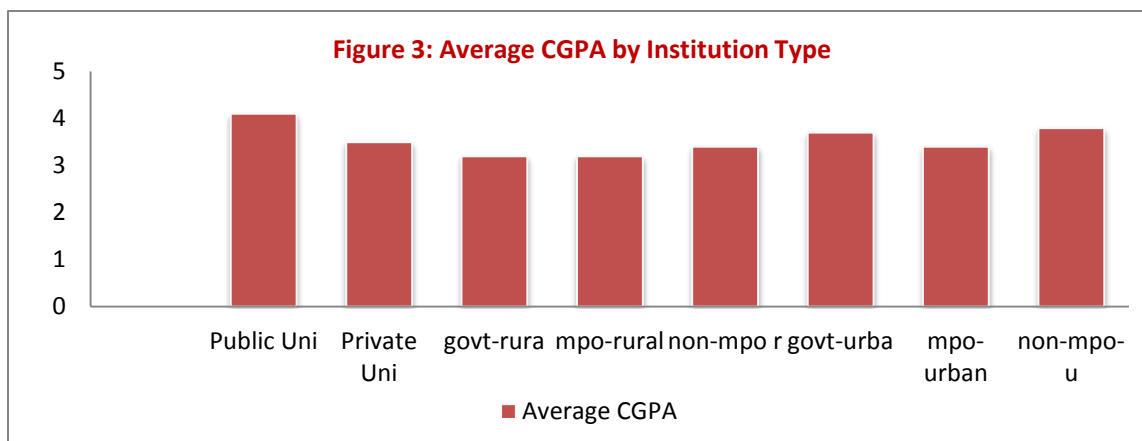
Source: Author's calculation, College Survey 2010

Approximately 53% of students in rural non-government colleges, which are usually small in terms of enrollment capacity, are from families who earn below 20 thousand taka per month. Only 12% of the students in urban government colleges and only 1% of the students in urban non-government colleges are

from the same income group.

from the same income group.

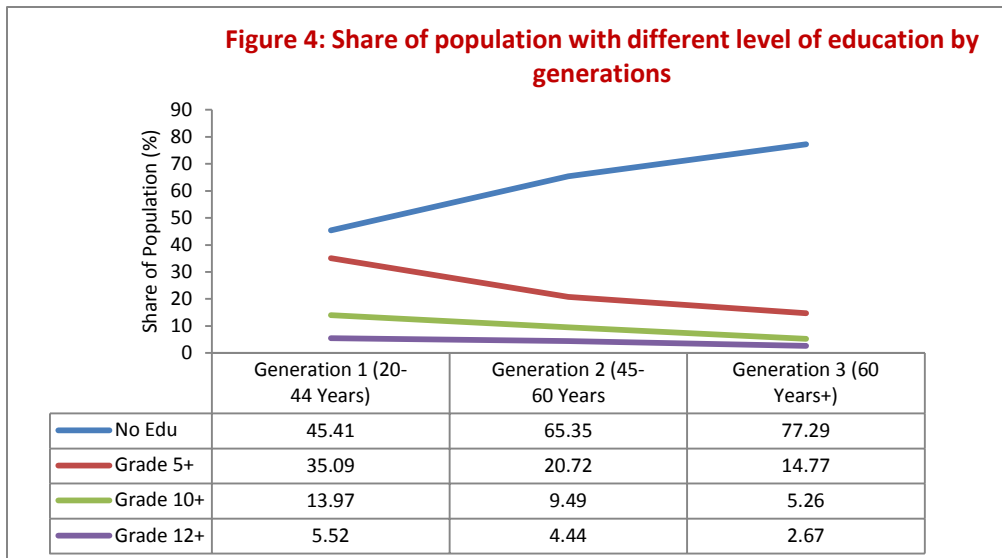
33. **The best students, in terms of their CGPA achievement at secondary and higher secondary levels, enroll in public universities followed by private universities, metropolitan public colleges and the large metropolitan private colleges (Figure 3).** This is due to the general perception that public universities and metropolitan colleges are the higher education institutions with top quality in Bangladesh. These institutions also have a low cost of education. These institutions accommodate nearly 44% of the tertiary level students in Bangladesh. More students attend colleges in metropolitan cities because institutions in those areas have high enrollment capacities even though most colleges are located in rural settlements²².



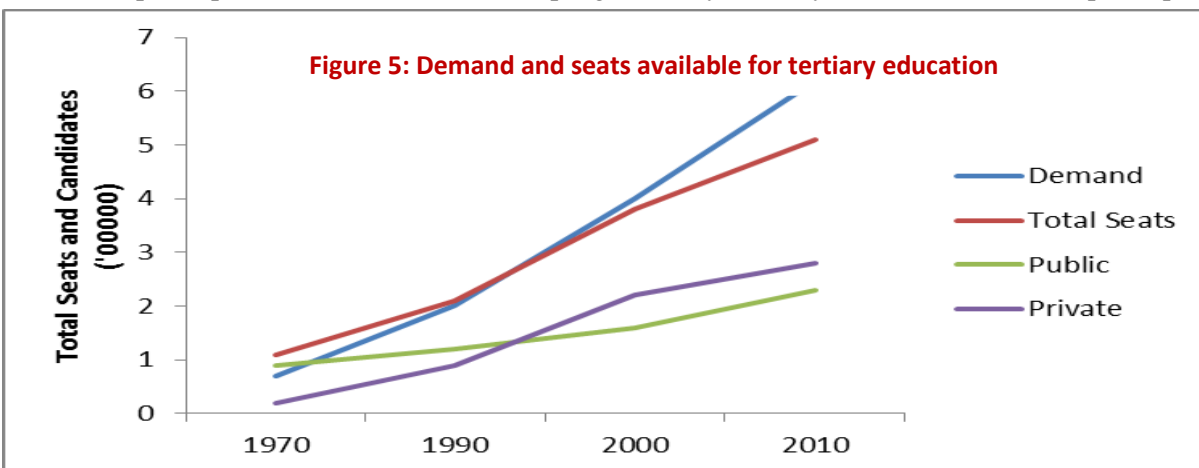
²² As classified in the sample survey.

3.4. Issues for Consideration

Issue 1 - The demand and supply gap in higher education in Bangladesh has widened in the recent years.



34. **Demand for higher education grew significantly along with increased participation and pass rate at the primary, secondary and higher secondary (HS) levels but supply did not expand at the same pace (Figures 4 and 5). The pass rate at the higher secondary level has almost doubled since 1990²³. The participation rate has also moved up significantly not only because of increased participation**



at the secondary level but also because of escalating pass rates over the last few years. All these factors together created enormous upward pressure on tertiary education. As a result, admission in the universities, especially in the public universities, has become extremely competitive and private universities have mushroomed. The total number of seats available has increased significantly since 1990. This growth has been fueled by an increase in intake capacity in public and private universities. Yet, in 2010, a total of 0.61 million students completed higher secondary school whereas there were seats for only 0.4 million students in the tertiary level institutions. More than 0.2 million students could not enter the universities and colleges (Figure 5). An estimated 50 thousand students, especially girls, could not enroll due to unavailability of seats within their locality.

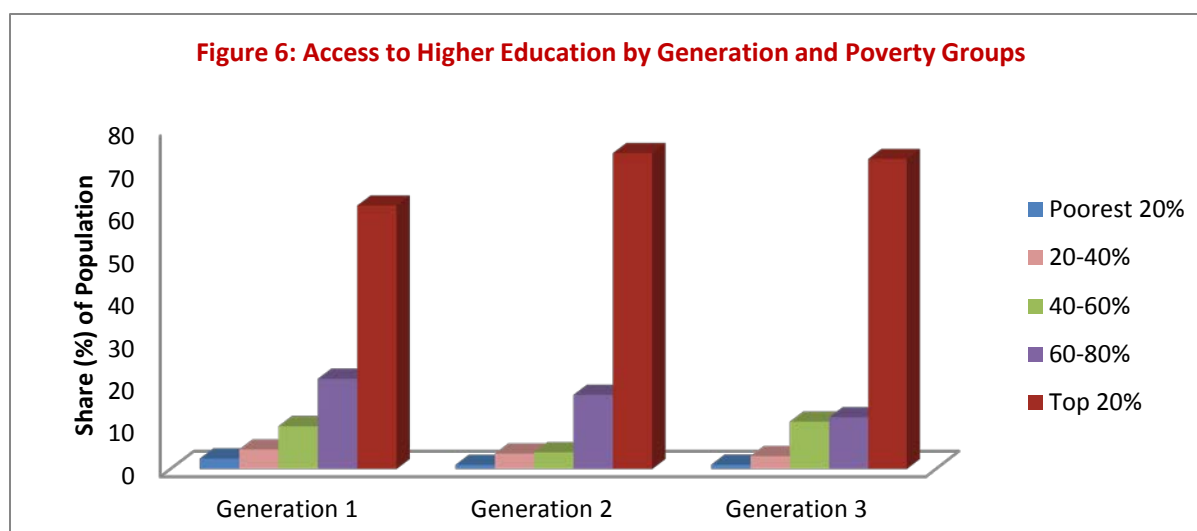
²³ Please see Annex 3

Issue 2: Inequality in accessing higher education – the poor has significantly less chance

35. **Inequality in accessing higher education in Bangladesh has been amplified in the recent past as the cost of education has escalated and became out of reach for poor- and the middle-income households.** Figure 5 shows that the richest segment of the population has always enjoyed and continues to enjoy the privilege of accessing higher education significantly more than the poor and middle income ones. The richest families have a history of accessing higher education and absorbing the increased supply; poor families are not experiencing as much benefit. While those from the middle income level have started to gain access over the last few years they still lag behind the higher income group in terms of accessing tertiary education opportunities. As figure 5 shows, the recent increased supply of tertiary education institutions has been led by the private sector. The high cost of establishing a private institution is reflected in high fee levels which can be prohibitive for lower income groups.

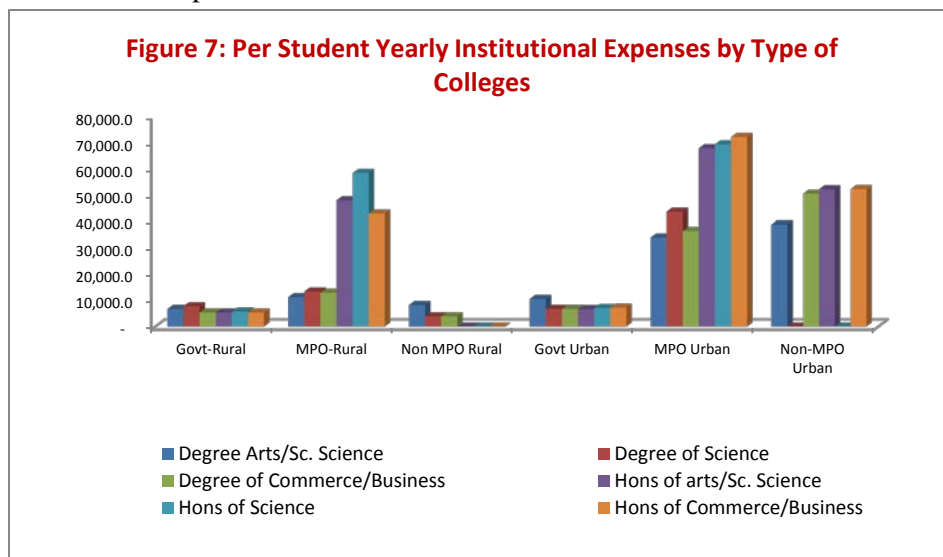
36. **In terms of costs of education, the large public universities charge the lowest fees, followed by the rural public colleges.** The survey data show that private universities and the renowned private colleges in the metropolitan areas are the most expensive tertiary level institutions (Figure 6). While public universities provide inexpensive education, students enrolled in the public universities are not from disadvantaged families (Table 5) and most of them are from the better-off families²⁴. Based on the survey data, private universities cater to the richest segment of society followed by public universities and the large metropolitan private colleges in terms of average family income.

Issue 3: Current supply of tertiary education is regionally biased and hence maintains reduced access for girls and the disadvantaged.



²⁴ Previous researches show strong positive correlation between students' achievement and the socio-economic status of their families. Historically, children from better-off families access better pre-tertiary institutions and receive better education.

37. **More than 65% of the people live in the villages of Bangladesh, while more than 60% of tertiary education seats are available in the urban or semi urban regions.** Most of the public universities are in the metropolitan cities and in the divisional towns. In recent years, Government has established few public universities in district towns but these have low enrolment capacity. Almost every



upazila in Bangladesh has at least one college, either public or private or both. Some 52 out of 64 districts have more than two colleges at the district towns. However, enrolment capacity in these colleges is generally small. More than 24% of high school graduates in 2010 were from the small towns where there are no higher education

institutions available. These students would have to travel outside of their towns to access higher education. However, generally speaking, very few Bangladesh families in rural areas would want to and can afford to send their daughters out to cities to pursue higher education. Therefore, this unavailability of higher education institutions constitutes a major reason for the high dropout rate after high school for girls and students of disadvantaged families.

38. **Girl students have less chance of continuing higher education compared to their male cohorts.** A regression analysis using HIES 2010 illustrates that the poverty status of the student’s family, region (rural and urban) from where the student comes from, gender and marital status of the student play significant roles in determining whether the student would continue after completing HS. If other factors remain unchanged, a female student has 21% less chance of continuing education above grade 12 compared to her male counterpart. Nevertheless, students from poor families, in a significant number of cases, drop out before completing high school and hence, most of the high school graduates are from middle to high income families. Marital status appears as the most influential indicator for educational continuity especially for girl students. When coupled with poverty, girl students have very slim chances to move up the education ladder.

39. **It is not clear whether ethnic and religious identity (i.e., non-Muslim students, indigenous population) of a student plays a significant role in accessing higher education after completing high school.** The sample size was too small for a definitive response with only 1.2% from indigenous communities. Bangladesh is traditionally a secular country and does not discriminate against people on account of their religious or ethnic identity. Hence, religion of a student is not expected to play a significant role in accessing education. However, the indigenous communities lag far behind in terms of accessing a range of social services including education.²⁵ Access to post primary schooling and SSC and HSC pass rate among these communities are pretty low compared to the national average²⁶. Consequently, access to higher education in these communities is low though a “special quota” for these

²⁵ Indigenous people in Bangladesh constitute 1.76% (2.5 million) of the total population of 142 million (Census 2011).

²⁶ Anecdotal assessment based on different reports. Reliable data rarely available and is not easily accessible.

students is maintained in all the public higher education institutions including colleges. Most of the colleges reported that they are unable to enroll indigenous students for filling up the quota.

Issue 4: limited scope for studying science and engineering

40. According to HIES 2010, among those who have ever accessed education above grade 12, more than 91% studied humanities and social science subjects and only 1.3% studied medical science and 2% studied engineering (Table 6). In terms of available seats for different disciplines, only 11% of the seats are available in the public universities for studying engineering and 21% are for science subjects. All others are for commerce, business and humanities and social studies. In the colleges, more than 65% of the seats are for humanities and business studies. Science education is rarely available in the rural colleges. As a result, only 20% of higher education graduates are from science or engineering. While humanities, social sciences and business studies have a place, Bangladesh needs to produce more science and engineering graduates in order to accelerate economic development. In private universities, only 9% of students are studying engineering. There are several reasons that limited opportunities for studying science education at tertiary level exist and a prime reason is the cost. High costs results in private institutions’ preference for offering humanities and business studies programs. The situation calls for policy makers in government and private colleges to seek urgent intervention so that a better balance may be achieved between enrollments for science/engineering and the humanities/business studies.

Table 6: Population with Grade 12 plus Education in Bangladesh

Discipline/ Education Level	%
Graduation in Humanities and Social Sciences	59.2
Post Graduation in Humanities and Social Sciences	32.4
Graduation/Post Graduation in Medical	1.3
Graduation/Post Graduation in Engineering	2.0
Technical Diploma	1.9
Nursing Diploma/Graduation	0.3
Other	3.3

Source: HIES 2010

Issue 5: The sector is not prepared to respond to the projected demand

41. The supply gap as well as inequality in accessing higher education (and its concomitant wastage of talents) will widen in the near future if the supply is not increased. The demand projection shows a sharp increase throughout the next decade (Table 7). Even if the SS and HS pass rate remains the same as 2010, the demand for entry in to the tertiary level calculated by number of HS graduates will increase by 40% by 2020. By 2030, 65% more students will try to get into the tertiary level in Bangladesh. It would be unwise to predict that the private sector would be able to react to this huge demand unless supported by the government.²⁷ Even if the private sector responds, they will mostly target the short run profit and as a result the places will not be accessible to the students from low and middle income families. It will also not be able to remove the regional inequity because private initiatives are likely to concentrate at capital Dhaka and other large metropolitan cities depriving district towns. In any

²⁷ The Strategic Plan for Higher Education 2006-2026 in its projection estimated that if 15% of HS graduates go for higher education in 2026 then at least 28 new universities will have to be established in the country. MoE’s MTBF from FY 2012/13 to 2016/17 (five years) has set the target of establishing four new public universities each year with five in the terminal year of 2016/17.

case, the increasingly prohibitive costs of land and facilities exacerbated by the lack of qualified teachers, particularly in rural areas, are major obstacles in the establishment of new higher education institutions.

Table 7: Projection Analysis

Lower Case Scenario						
		2010	2015	2020	2030	Comment
SSC Pass Rate	%	74.0	74.0	74.0	74.0	Assumption: SSC Pass Rate Remains Unchanged at 2010 level
SSC Students	N	9.0	9.5	10.0	10.5	Assumption: 0.5 million students increases every year
Transition Rate	%	80.0	80.0	80.0	80.0	Assumption: Transition Rate Remains Unchanged at 2010 level
HSC Students	N	7.2	7.6	8.0	8.4	
HSC Pass Rate	%	70.0	70.0	70.0	70.0	Assumption: HSC Pass Rate Remains Unchanged at 2010 level
Total HSC Pass Students	N	5.0	5.3	5.6	5.9	
Percentage Increased	%			11.1	16.7	
Higher Case Scenario						
SSC Pass Rate	%	74.0	76.0	78.0	80.0	Assumption: SSC Pass increased by 2 percentage point by each 5 years
SSC Students	N	9.0	9.5	10.0	10.5	Assumption: 0.5 million students increases in every 5 years
Transition Rate	%	80.0	82.0	84.0	86.0	Assumption: Transition Rate increased by 2 percentage point by each 5 years
HSC Students	N	7.2	7.8	8.4	9.0	
HSC Pass Rate	%	70.0	75.0	80.0	85.0	Assumption: HSC Pass Rate Remains Unchanged at 2010 level
Total HSC Pass Students	N	5.0	5.8	6.7	7.7	
Percentage Increased	%			33.3	52.3	

4. Quality and Relevance of Teaching and Learning in Colleges

4.1. Who are the teachers?

42. **College teachers numbering 54,503 include those teaching at Higher Secondary through master's degree levels.** Little more than 20% of these teachers are female and only 4% of them have qualifications higher than a masters (M Phil or PhD). About 82% of the teachers are employed in the private colleges, half of whom receive their salary and allowances from the government through MPO subventions. The overall average Teacher-Student Ratio (TSR) is 1:35 with wide variations at different locations and academic programs. The number of students to teachers is much higher in the large institutions especially in urban and metropolitan areas.

43. **Most of the public college teachers and majority of the private college teachers fulfill the educational criteria of holding Masters Degree but few have additional qualifications, research experience or pedagogical training.** The very small proportion (4%) possessing doctoral level or M.Phil. degrees, teach largely in government colleges with few in renowned private colleges located in Dhaka and other metropolitan cities. A good number of UGC scholarships²⁸ are awarded for M.Phil. and Ph.D. degrees and since 2005 these have been open to private college teachers but little is known about the uptake. Drawn from the sample survey, Table 8 (a) shows that of the six categories of colleges studied the 'government-urban' category of colleges had the largest proportion of academic staff with additional post-graduate qualifications. While more than 90 percent of teaching staff in all categories have a Master's degree, the non-MPO-urban category is the outlier with only 70.5 percent with a Master's qualification. Urban-government colleges tend to be older, large in size with available space for instructional activities, possessing established academic infrastructure, with adequate teaching-learning facilities and good public reputation. These institutional characteristics attract better qualified teachers. With a considerable number of available posts, the government also finds it relatively simple to deploy qualified teachers to such positions. In the majority of public and private colleges, there was little information available on qualifications and experience which could make distinctions between those teaching higher secondary, degree, honors and masters level programs.

44. **Post-recruitment training focuses on government colleges and not on private colleges and the majority of college teachers do not improve on qualifications possessed at recruitment.** A deficit in further academic qualifications or content knowledge and pedagogical skills can be compensated by relevant and targeted training on the job. NAEM provides foundation training for new entrants to the Bangladesh Civil Service (Education) cadre, including heads of educational institutions and other educational personnel. Its training program includes largely institutional and financial management and administration areas, computer applications and research methodology with a minimal number of hours focusing on classroom level knowledge and pedagogy.

45. **In the last five years only 10% of trainees were from private colleges but none were from non-MPO rural and urban colleges.** Current plans show that from 2013 onwards a small number of 40 private college teachers will participate annually in Computer Applications and English Language courses over a four-month period. Public college teachers also attend a 45-day NU-organized training program which is mainly a refresher course on the content of honors subjects, not pedagogy. The information gleaned paints a scenario of classroom teaching as monologues largely based on the lecture mode without seeking active student participation, and with little attention to fostering creative, critical minds. Lack of

²⁸ Known as UGC M Phil and PhD fellowship. From 2005 the number of PhD fellowships has been increased to 100 per year. Currently (2010) 88 researchers are recipients of PhD fellowship of whom eight are government college teachers. The number of M Phil fellowship is 50.

opportunities for a planned system of training and upgrading contribute to the underperformance of staff and the inability to attract better qualified staff to rural colleges.

46. **Students participating in the sample survey rated the teaching skills of academic staff from ‘poor’ to ‘average’.** Many teachers, particularly in government colleges, are engaged in routine non-teaching administrative tasks such as student admissions, registration, and examination arrangements which distract and take away time from teaching, often resulting in unfinished course work. Other reasons identified for generally poor teacher and student performance include: the absence of appropriately qualified and experienced teachers; poor financial, physical and academic infrastructure; long drawn-out bureaucratic procedures to recruit teachers in government colleges, vacant positions particularly in rural areas with difficult living conditions to which teachers are reluctant to move, and teacher vacancies particularly in private colleges with financial constraints; teacher involvement (from private colleges especially) in political activities; and lack of teacher motivation in the absence of attractive remuneration packages and career development opportunities.

47. **Anecdotal evidence points to the reality that classroom-based teaching and learning is often not the chief method of imparting education to students at college level.** Private tuition or ‘coaching classes’ in centers run by college teachers for their students appear to constitute the main modality for instruction as well as success in examinations in a large proportion of colleges. Such a situation results in both teachers and students paying little importance to classroom teaching and learning as well as teacher and student absenteeism. Often, the same teachers, usually in the subjects of English Language, Mathematics and Science, are busily engaged conducting private tuition classes to students outside of the college in coaching centers. This set of conditions appears to be truer of poorly-managed institutions, whether public or private, urban or rural, than well-run, well-staffed colleges. If true, then the college teaching-learning system, including the accountability of teachers and management, needs to be closely examined by NU/DSHE and actions identified to improve the system. The general picture painted suggests a sub-sector that lacks a vibrant group of professional teachers; rather it suggests a stagnant group of teachers who are locked into secure jobs (government plus MPO) and see little reason to change their ways.

Table 8 (a): Profile of College Teachers by Category of Colleges

	Av. N Professor Positions	Av. N Professors Working		Average N Lecturer/Asst. Prof post	Av.N Lecturer/Asst. Prof working		Av.N Total Teachers Working	Teachers with PhD/Mphill %	Teachers with MS %	Teachers with Publications %	Teachers with less than 5 years of exp %	Teachers with more than 5 years of exp %	Teachers with training %
Govt-Rural	6.0	4.4	18.2	29.2	18.2	75.1	24.3	1.7	94.9	2.4	17.7	79.2	47.9
MPO-Rural	0.4	0.4	1.8	25.2	22.7	94.5	24.0	2.0	96.3	2.2	8.0	89.8	14.4
Non-MPO Rural	-	-	-	20.4	17.0	93.4	18.2	-	98.9	-	12.1	84.6	0
Govt.-Urban	18.6	15.6	26.6	49.0	39.9	67.9	58.8	10.6	92.2	5.6	13.0	77.7	57.15
MPO-Urban	1.6	1.7	4.8	31.6	28.1	79.1	35.5	2.9	94.9	3.4	14.0	82.1	18.83
Non-MPO-Urban	6.5	6.5	12.6	35.0	34.3	66.2	51.8	-	70.5	8.7	24.2	50.2	0

Source: College Survey 2010

Table 8 (b): Resources for Teaching and Learning

	Total N of Colleges	Colleges With Computer Lab	%	Computers for Administrative Purpose	%	Number of Computers in the Computer Labs	Av. N of Books in the Library	Av. N. of Journals	Av. N. of Books Bought in 2009
Govt.-Rural	17	7	41.2	15	88.2	4	7970	2	359
MPO-Rural	188	87	46.3	102	54.3	5	3444	21	185
Non-MPO Rural	5	3	60.0	5	100.0	4	3043	0	194
Govt.-Urban	34	17	50.0	30	88.2	15	16709	21	507
MPO-Urban	53	32	60.4	41	77.4	10	6464	25	492
Non-MPO-Urban	4	2	50.0	4	100.0	46	8530	13	563
Total	301	148	49.2	197	65.4	7			

Source: College Survey 2010

48. **College teachers' terms and service conditions, particularly low levels of remuneration, constitute part of the reason for their low quality performance and motivation in classroom teaching.** This is particularly true in non-MPO rural colleges, where the salary paid to teachers is not only grossly inadequate but also highly irregular and without additional allowances and benefits, unattractive career paths, resulting in low job satisfaction and motivation. A uniform schedule of salary scales, recognized and endorsed by NU is absent. Colleges with large numbers of students collect more tuition fees and lecturers could draw higher salaries. A high salary in Bangladesh is closely related to the status of the person as well as to the profession. The lucrative private tuition industry provides additional remuneration for teachers which compensate for low salaries. Government college teachers receive higher salaries at entry, reasonable remuneration which includes realistic provision for house rent, medical allowance, annual increments and promotion to higher posts. Better salary scales may not be necessary only for infusing motivation but also for raising the status of college teachers in society. The expectation is that there would be a positive impact on the quality of teaching seen in increasing teacher-student contact, self-confidence, job satisfaction leading to conscious efforts to develop teaching skills and engaging in their jobs with interest.

4.2. What do students learn?

49. Under the National University Act, 1992, NU's Center for Curriculum Development and Evaluation (CCDE), through a five-member subject based committee – the Committee of Curriculum Development and Evaluation (CDE) - is responsible for developing, monitoring and evaluating the existing curriculum with the aim of updating it periodically.

50. **The college curriculum is centrally developed with scant input from key stakeholders. Review and renewal or updating of the curriculum does not occur in a systematic manner.** The curriculum and syllabi for all public and private NU-affiliated colleges are developed centrally by the National University's CCDE which is made up of four members from public universities and one from NU affiliated colleges with the assistance of experts/subject specialists from public universities. The situation is marked by management and administrative weaknesses – NU's inability to fill five vacant posts for curriculum development experts is a case in point.

51. Institutional arrangements for developing the curriculum seldom include the participation of stakeholders including MoE, UGC, DSHE and NAEM, with nominal participation of college teachers. The three important groups of stakeholders – college teachers, students and employers – are the end users of the curriculum and assessment process and are, impacted most by the quality and nature of the curriculum. However, they are not involved in the process. Without the inputs of these key stakeholder groups, the top-down nature of the NU curriculum/syllabus does not take into account unfortunately the institutional and academic realities of colleges as well as the world of work. Better monitoring and updating by CCDE does not take place on a regular basis, resulting in many aspects which are out of step with global changes in terms of knowledge, skills and pedagogy, all of which characterize quality higher education institutions.

52. **More importantly, there is a growing disconnect between what is taught in colleges and what is required by the labor market with key emerging knowledge and skill areas** such as gender studies, disaster management, information technology and computer applications. Computer applications, for instance, should be a basic element in all curricula but lamentably is limited to those institutions who can afford the required equipment (see Table 8 (b)) or who have staff possessing special interest or have been fortunate enough to have received training. Survey data revealed that 17 rural government colleges had 7 computer labs among them; each possessed 4 computers while 188 MPO-rural colleges had 87 computer centers with 5 at each lab. The best in this group was the non-MPO-urban data where four

colleges could boast possession of 46 computers. While it was unclear how these equipment were being used, the fact that these investments have been made is a positive sign. As the previous section noted, efforts have begun at NAEM (and NU) to provide support for Computer/IT programs through training of college teachers, but the numbers are too few and the availability of equipment too patchy to see any major outcome thus far.

53. **Access to learning resources and logistical support in NU colleges is variable with rural colleges being worst off.** The availability of hardware however does not pre-suppose the skills teachers possess to best utilize it. A case study of a private MPO-rural college offering high school, bachelor (pass) and vocational education to 1,100 students revealed that it has ICT facilities, a multimedia projector and computer lab with internet connection. The projector has only been used twice since it was purchased in 2006 and most students are not computer-literate with little institutional interest demonstrated in changing this situation. The case study ascribes the unfortunate situation to teachers' lack of qualifications, unwillingness to change and acquire new skills. What was not stated in the case study is if support has been available for relevant training. Disparities among colleges exist relative to resources available to students particularly in areas such as IT facilities, electronic libraries, recent books and journals, and classrooms with audiovisual facilities. Attention to the status of science laboratories and technicians required as support staff is particularly important to strengthen science programs which are at a low ebb in this segment of the tertiary education sector.

54. **Availability of libraries, books and journals as learning resources:** Libraries with their collections of relevant books and journals provide important resources for strengthening the teaching-learning environment, providing access to those students who seek knowledge/information outside of classroom lecture notes. National University regulations stipulate that a minimum of 3,000 books needs to be held in colleges which run Honors programs with 2,000 as minimum in Degree level colleges. Survey findings showed (see Table 8 (b)) that MPO-rural and non-MPO-rural kept very near the minimum required and, as expected, urban government colleges with their steady funding source have double the average number of books available in non-MPO urban colleges.

55. **A cause for concern was the case study finding that many stocks of books did not seem to be related to the programs being offered.** Unfortunately, too, the priority in many libraries seemed to be the purchase of fairly low-quality notebooks for use of teachers and students in place of full, prescribed texts and, in many cases, students seldom use the library in spite of the investment by college authorities. Where subscription to journals is concerned, MPO-rural and urban government are on par while non-MPO-rural colleges do not subscribe to any journals at all. The actual journal titles and their relevance, and overall utilization of library resources have not been captured by this study and might have revealed harder data on how these supported teaching and learning.

56. **The study showed that NU-affiliated colleges offered a limited number of postgraduate programs and research.** The organization of postgraduate education programs by definition subsumes research activities. Among affiliated colleges in the survey, only 37 or 12.3 percent of colleges offered masters level programs. While more than 90 percent of teachers possessed master's degrees (except for non-MPO urban at 70.5 percent), a minimal proportion ranging from 1.7 percent to 10.6 percent were M Phil or PhD holders. Access to research skills would benefit both staff and students, enriching academic life and outcomes at many levels. In keeping with Article 29 of the National University Act, the management of NU has an enormous role to play here in terms of advocacy, support through training of staff, and provision of earmarked financial allocations ²⁹.

²⁹ Article 29 of the National University Act of 1992 regarding NU's Postgraduate Education, Training and Research Center states that the NU will be '...responsible for the initiation and realization of staff development programs, instructions (sic) for college teachers and advanced education and research programs of the University.'

57. **Key officials of the NU have acknowledged the need for restructuring the current curriculum and the assessment system, the organizational setup of departments in NU-affiliated colleges, the inclusion of research in the curriculum and the development of infrastructural facilities for colleges.** There is need to prioritize both the revision of curricula as well as graduate and post graduate programs. Some steps to bring about reform include the introduction of a new curriculum in 1993-94 for the first batch of three-year honors students; and new courses in 2001-2002 with the first batch of four-year honors students and these have remained except for some modifications in 2009-2010 to align the program to changes made to assessment.

4.3. How is student performance assessed?

58. **Student performance is assessed through centralized external examinations.** Annual examinations held at the end of the academic year constitute the primary means for assessing students' academic achievement. In a single year, NU has the task of organizing 97 examinations in 382 subjects and 1,950 courses, all of which require a total of **569 days**. The questions are set by public university teachers engaged by NU and examinations are held on college premises. College teachers are not involved in the question-setting process at all. Interviews of college teachers and students carried out during the study identified perceptions that university teachers are not well-versed in the NU curriculum, a situation which poses problems in terms of question-setting as well as marking of answer scripts. For bachelor's (pass and honors) and master's level answer scripts, two examiners are engaged for external evaluation and they are mainly senior teachers selected from public universities. Sometimes college teachers are selected as examiners for scripts from colleges other than their own. Examiners often are unable to meet agreed deadlines for completion of the marking process which creates delays in the publication of examination results, thus contributing to a significant time-lag in the academic schedule.

59. **Internal evaluations are conducted by college teachers through class tests organized and conducted by course teachers.** College teachers provide terminal marks for these tests which may include assessment of course work. The average scores are sent to NU but it is not known if they contribute to overall assessment. The value of these periodic assessments as part of internal evaluation at the college level, however, is open to question as they are approached with varying levels of seriousness with urban colleges dealing with them more seriously than rural colleges.

60. **There is no evidence of systematic monitoring of the performance of the whole assessment system, including annual externally set examinations and internal college-based testing. Regular and consistent** monitoring of assessment, examinations and the marking system does not take place which makes systemic improvement difficult. The NU affiliated college system is huge and unwieldy and NU is yet to identify and put in place an assessment/examination system which would be efficient, on-time and whose methodology would be able to capture adequately differential performance of students. The logistics of numbers is an enormous challenge but given the examination's high stakes, MoU, DSHE, UGC and NU need to mount a public review of the assessment system. Such a review needs to pay heed not only to logistical and governance arrangements but also to the capacity of those developing and marking the range of examinable disciplines. Since student examination fees constitute a major proportion of NU revenue (60%), NU's clients - students – should expect to enjoy a more efficient and effective process where examination organizers ensure the suitability of markers enlisted, the timeframe for examinations, marking of scripts and announcement of results. Part of the fees income could be utilized for training of examiners, as well as increasing the knowledge and skills of those who set examinations. In short, NU needs to spearhead the professionalization of its assessment system.

61. **There are allegations that administrative mismanagement exacerbates the examinations process.** Two examples are examiners marking answer scripts in subjects they do not teach; and the inadequacy of disseminating key information regarding technical aspects of the examinations. In the 2009/10 examinations, NU had introduced an innovative assessment approach to part of the examination but did not organize an orientation program, critically required for examiners as well as examinees. Assessments were to be based on a grading system and a changed question pattern seeking creative responses. These were indeed both positive changes towards strengthening the system. Since the whole approach to learning and examinations is premised on rote learning and regurgitation, the move to different patterns of questions requiring more individualized responses was salutary and revolutionary. If successful, there would be a significant impact on teaching style, student learning as well as textbooks and other instructional materials seeing that the examination tail often wags the system. Many students participating in the survey thought that the long-term benefits of the new question format were positive but preparation for change was missing. The situation required a much-needed program of awareness-building, information-sharing, dissemination and orientation with respect to the new grading system and the changed modality and format of questions. The effort to change the nature of examinations shows indeed the potential for positive and substantive change in teaching and learning that appropriately-managed innovations in assessment can bring.

62. **The NU affiliated colleges have been locked into ‘session jams’.** The phenomenon of ‘session jam’, a term that has passed into South Asian tertiary education examination vocabulary, contributes greatly to wastage of resources and increasing unit costs. The term refers to the extension of time students require to complete examinations. For example, a four-year bachelor level honors program of study may take five or six years to complete. Contributing to the extended delays are the deferments in examination timing due to several reasons which include: NU difficulty in orchestrating its complex examination *enterprise* in a timely manner, examiners not completing marking of answer scripts according to agreed schedules, student and staff strikes, and national-level political upheavals which feeds into campus-level turmoil.

63. **The application process for admission has been reformed.** A positive step has been NU’s introduction and implementation of online *application* facilities for admission from 2010 which in accelerating the admission process, has potential for stopping delays in the scheduled start of academic years, previously a cause for delaying starting of sessions on time. However this new system needs more time to remove the bottleneck in admission due to the reported inept handling of the technology.

4.4. How do college graduate perform in the labor market?

64. ***Approximately 4% of the Bangladeshi labor market has a bachelor’s degree or higher; 2.2 percent have a bachelor’s degree and 1.5 percent has post-graduate degrees while the remaining 96 percent, including all those working in the formal and informal sector, have up to a secondary education (World Bank 2013). College graduates are often found in the formal employment sector, which constitutes about 11 percent of the labor force, and more than half of them have professional occupations.***³⁰

65. ***Generally speaking, college graduates are finding jobs equally as well as university graduates and the unemployment rate is relatively low – only 1.5 percent of people with a bachelor’s degree and 2.4 percent of people with a master’s degree.*** Approximately 67 percent of the people who earn a bachelor’s degrees hold wage jobs according to HIES 2010. Twenty-eight percent of people who earn a bachelor’s degree are self-employed. The proportion is almost the same as that of university graduates. The proportion of people who graduate with a bachelor’s degree and hold wage jobs is also 68 percent.

³⁰ Professional occupation categories include: managers, professionals, and associate professionals or technicians.

Master's degree holders tend to find wage employment at a higher rate; 81 percent of college graduates and 85 percent of university graduates, respectively. The proportion of college graduates finding professional occupations is almost the same as university graduates, although there is a difference between public colleges and private colleges, where private college graduates tend to find more professional occupations.

66. ***However, the entry salary of college graduates is generally lower than that of university graduates for the same occupation.*** An enterprise-based skills survey of 2012 found that college graduates receive a 13 percent lower entry salary compared to university graduates. This shows that the market provides wage premiums for university graduates over college graduates. However, such wage differences disappear over time and there is no wage differential between university and college graduates among experienced workers. This finding implies that no systematic differences exist in the productivity of those workers (World Bank 2013).

67. ***College graduates may be less preferred to university graduates when jobs require special subject knowledge and skills.*** Although the share of college graduates finding professional jobs is not very different from university graduates, it varies among academic disciplines. College graduates who studied arts and humanities or science and mathematics fields tend to experience a relatively lower rate of finding professional jobs when compared to university graduates. It is probable that professional occupations which require specific subject knowledge and skills prefer university graduates over college graduates. On the other hand, graduates with business majors are performing equally well as university graduates in terms of finding professional occupations.

4.5. Issues for consideration

68. ***Colleges face many challenges if they are to deliver quality education which is relevant to employers and society.*** These challenges need to be resolved and call for attention by national authorities and agencies; many challenges relate to institutional practices regarding the teaching-learning environment. These include:

College Teachers

69. ***The difficulties of recruiting and deploying appropriately qualified college teachers, particularly in private colleges, impact negatively on teaching and learning.*** Government college teachers possess Masters level qualifications at entry but the Public Services Commission process is protracted. In private colleges under-qualified teachers may be recruited due to undue political pressure from local elites. Particularly dire is the situation of small private rural colleges which are unable to attract good teachers and yet may be the only avenue for post-secondary education for girls and disadvantaged groups. In both urban and private colleges teacher deployment practices raise questions as many do not have relevant qualifications for the subjects they teach, particularly in new curriculum areas.

70. ***A long-term post-recruitment training strategy, including funding sources, is required so that investment in training and professional support is planned rather than conducted on an ad hoc basis.*** NU and NAEM need to work with other training providers such as universities, training colleges and research institutes to provide and update professional development courses for both public and private colleges.

71. ***Lack of a strong monitoring mechanism.*** While NU has an inspection system, it is not clear if a teacher performance monitoring and supervision system is in place at the institutional and system level so that both teachers and managers are aware of what is being monitored and how performance is evaluated. Criteria of effective teacher performance have to be drawn up, well disseminated and followed up to

provide advisory support to teachers on a regular basis. Teacher accountability is weak, pointing to the need for timely monitoring and supervision mechanisms carried out by trained practitioners.

Curriculum and Teaching-Learning Resources

72. ***The differential access to education resources, often based on significant variations in funding sources, serves to emphasize the variations within the affiliated colleges system and, in many cases, the difference between a well-performing college and one which is mediocre.*** Colleges would benefit from a more systemic approach to the provision of adequate education resources, perhaps building in requirements prior to accepting applications for affiliation status. For such a regulatory change, NU, MoE and UGC need to work together in a coordinated way.

73. ***Given the large number of private colleges, many of which have low enrollments in rural areas, it might be cost-efficient for these to take advantage of both economies of scale and the autonomy afforded by NU to formally pool some of their resources such as libraries, laboratories, personnel, computer labs, and unused space.*** In this respect, licensing and registration of new colleges should take available/planned resources into account so that student numbers and costs can be regulated to maintain quality in the system. Such policy developments may need to take on board the closure of poor performing colleges (or mergers given prevailing logistics) as a critical measure for enhancing overall student outcomes.

Assessment

74. ***A broader review of NU's examinations process is required so that it embraces not only content validity and updating but also the process.*** Assessments or examinations must be seen as continuous with the content and pedagogy of teaching and learning and as part of the total curriculum, not a feature that is tagged on. NU may want to review its assessments activities as part of a systemic review, giving attention to stakeholder feedback on the total process.

Quality Assurance

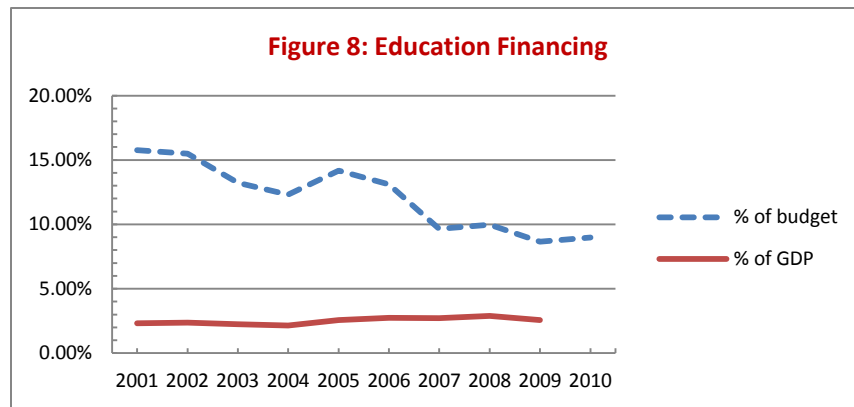
75. ***The quality assurance system does not exist in National University affiliated colleges.*** There is no national quality assurance framework in Bangladesh. The academic programs at colleges are not based on a set of criteria and standards such as learning outcomes and credits based on students' academic load. NU has not established a credit system to facilitate credit accumulation and standards of transfer that would be acceptable within and outside Bangladesh. There has not been any attempt to introduce self-assessment of programs or institutions based on an agreed upon procedure. Therefore, the public perception about the quality of programs offered by affiliated colleges as well as the qualifications of NU graduates is poor.

5. Financing and Financial Management in Colleges

5.1. Higher Education Financing

76. The demand for higher education in most countries around the world is growing far faster than the ability or willingness of governments to provide public resources that are adequate to meet this demand. However, Bangladesh has one of the lowest GDP allocations for education³¹ in general and in higher education in particular as compared to some other developing countries. Overall allocation for education has remained almost flat between 2% - 3% of GDP between 2001 and 2009 and with 0.12% on higher education (Figure 8).

77. **In terms of budget, MoE receives only 6.59% of national budget and higher education (i.e. universities, UGC and government colleges) receives only 15.5% of the MoE budget in 2011/12.** In addition, the shares of higher education budget to both MoE budget and national budget have declined from 18.43% to 15.5% and 1.28% to 1.03% respectively over the 2008/09 to 2011/12 period. During the same period, the MoE allocation to government colleges (which includes higher secondary level) declined from 7.10% to 4.82% while the allocation to the public universities has declined from 11.19% to 10.61% (Table 9). While the share of higher education in the total education budget is minimal, most of it goes to public universities and a negligible portion for public degree colleges. Government's



financing comes in the form of recurrent expenditure and development grants though only a small share is allocated for development purpose. Considering the significant increase in the demand for tertiary education, especially for colleges in recent years, and a great need to improve the quality of government colleges, the current funding level is inadequate.

Source: Finance Ministry's Annual Economic Review

Table 9: GoB Allocation to Ministry of Education, Universities and Public Colleges (in Billion Taka)

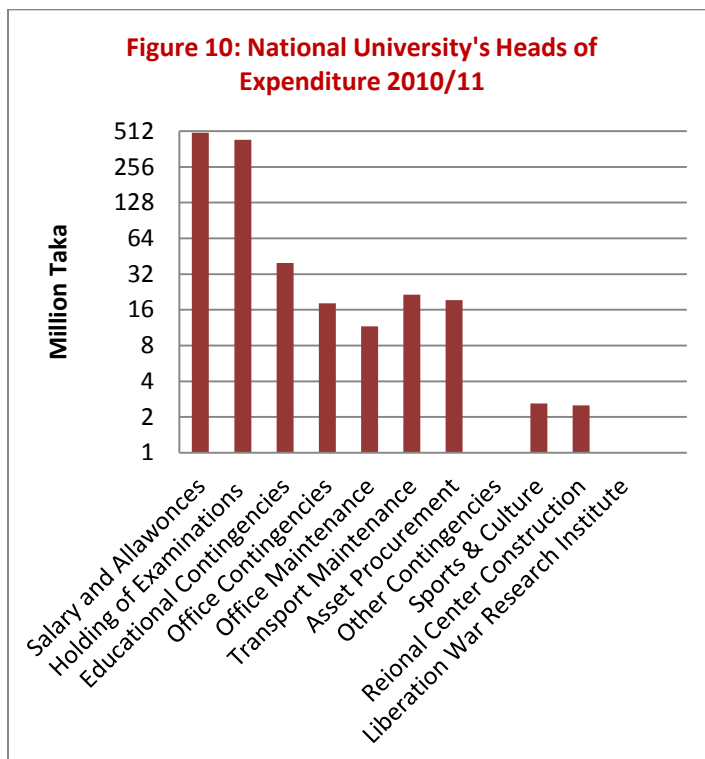
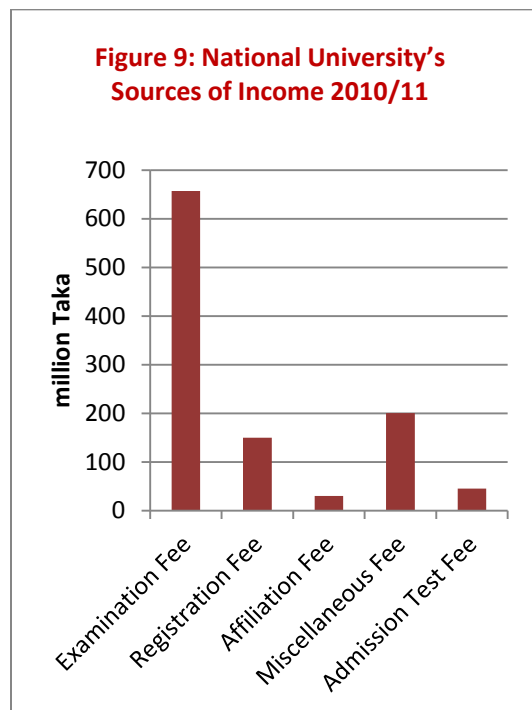
Financial year	National Budget	Allocation to MoE	% of National Budget to MoE	MoE Allocation to Univs	MoE Allocation to UGC	MoE Allocation to Govt Colleges	% of MoE Budget to Govt Colleges	% of MoE Budget to Univs	% of National Budget to Univs	% of MoE Budget to higher Ed	% of National Budget to higher Ed
2007/8	936.08	61.61	6.58	6.40	0.07	-	-	10.38	0.68	-	-
2008/9	941.4	65.38	6.94	7.32	0.08	4.65	7.10	11.19	0.77	18.43	1.28
2009/10	1105.23	89.51	8.09	8.51	0.09	5.14	5.74	9.50	0.76	15.35	1.24
2010/11	1300.11	101.55	7.80	10.91	0.11	5.09	5.01	10.74	0.83	15.86	1.24
2011/12	1612.13	106.33	6.59	11.29	0.11	5.13	4.82	10.61	0.70	15.55	1.03

Source: Budget in Brief (2007/8 to 2011/12), Finance Division; Medium-Term Budgetary Framework (MTBF) (2012/13 to 2016/17), Finance Division; Yearly Budget (2011/12) Ministry of Education.

³¹ The sector includes Ministry of Education, Ministry of Primary and Mass Education and Ministry of Religious Affairs.

5.2. Financing and Financial Management of National University and Affiliated Colleges

78. The NU income sources are largely based on the various categories of fee charged to students and institutions³². The bulk of expenditure is for salaries and examination related expenses with insufficient resources set aside for instructional quality. For example, expenditure for research, curriculum development and other academic work were 3% or less. The NU has separate provisions for the training of college teachers under its development budget. Provision for staff training was a low 0.6% in 2010 and even a lower 0.06% in 2009. The two figures (figures 9 and 10) below provide the sources of income and categories of expenditure.



Source: National University Budget Book, 2010/11

79. **Financial management in colleges varies depending on the nature and types of the institutions.** Colleges can be categorized into three groups in terms of their financing relationship with government irrespective of their location in urban or rural areas: (i) Government college, (ii) Private college with MPO, and (iii) Private college without MPO.

80. **Government budget allocations constitute the lion's share of income for government colleges while student tuition and fees constitute less than 20% of total income.** This implies that, in addition to government financing of public colleges, students also contribute to college financing by paying tuition and examination fees which mostly go to the Treasury and the National University. Except for these two sources, government colleges cannot mobilize resources from sale of goods and services,

³² NU does not receive any GoB financing or grant via UGC. However it implements several small development projects with GoB funding which NU receives directly from the Government.

donation and/or other fund raising activities due to stringent regulations of the government, unlike autonomous public universities.

81. **Like many other functions, government colleges are governed and regulated by MoE via DSHE for their financial matters.** While National University provides curriculum and academic support, and intermittent training of academic/teaching staff, MoE/DSHE gives financial support both for recurrent and development expenditures of colleges. NU also implements development projects in colleges with funding from MoE.

82. **Budgets submitted by government colleges are approved on the basis of strength of staff and precedence, not per capita averages by fields of study.** Gradual rise in budget allocation corresponds with gradual increase in student intake and faculty. Under the Medium Term Budget Framework (MTBF), the education sector budget is approved by the Finance Division on the basis of strategic objectives and priorities fixed by the Ministry of Education which is reflected in a three year rolling investment plan anchored in a policy and project portfolio prepared by the MoE. Resource allocation, therefore, is linked to the development and non-development funding requirements drafted by the Ministry. Allocations are transferred under three heads of expenditure: salaries, educational contingencies and other contingencies. College principals have little flexibility in spending received funds. Neither are they allowed to raise funds from the private sector. Funds may not be transferred across categories. Any savings at the end of the year are returned to the exchequer. This process destroys any incentives to save and in fact becomes a disincentive for efficient resource management.

83. **In government colleges major recurrent expenditure is salary of teaching and support staff which constitute over 70% of total budget expenditure.** Most of the remaining part is used for essential administrative and maintenance costs with very little left for actual education related expenses. All major revenue heads of the college such as student fees and exam fees are deposited in the government treasury. Similarly, all major expenditure heads including infrastructural development works are directly disbursed from the treasury at the direction of Ministry of Education. This indicates that government colleges are highly regulated and have little independence in making financing decisions except preparation of annual budget and generally unable to respond speedily to market changes.

84. The management, headed by the Principal, is run by following the directives of the government's financial rules and regulations. Therefore, government influence is all- pervasive in academic matters such as current academic plans, existing degree programs, curriculum development, human resource, financial resource mobilization, infrastructural development, and annual budget. Such widespread control of the government in public colleges of the country ranges from staffing, transferring and promoting staff at higher rank, staff remuneration, spending money, internal and external auditing of accounts and budget to offering degrees in different disciplines, determining inter alia number of students and enrolment criteria, tuition fees and other charges.

85. **Private colleges with MPO have some financial autonomy.** Private colleges that receive MPO enjoy some autonomy in managing their finance. However, since they are dependent on the government's decision on MPO roster and tremendous effort is required to be on the roster, constant lobbying with the DSHE and MoE officials is needed. In most cases the local members of Parliament (MP) do the lobbying at the Ministry level. The MPO aspirant teachers do their lobbying at the DSHE which prepares and maintains the MPO roster.

86. **Financial Management in Private Colleges.** Government MPO grants constitute about 20% of income for private colleges while student tuition fees constitute more than 80% of total income. Government subventions finance 100% of the basic salary of the approved teaching and support staff

posts in all recognized private colleges. However, significant numbers of teachers are not covered by the subventions due to MPO eligibility criteria³³. Private colleges raise funds from community and private donations and some have sources of earnings from renting out of shops constructed on their land.

87. **Financial management of private colleges is complex and multi-dimensional in terms of internal as well as external controls.** All decisions are made by the college governing body³⁴. This body sets the annual budget for all recurrent and development expenditures. Private colleges must have their accounts audited annually by professional chartered accounts firms. Their major recurrent expenditure is salary of teaching staff and employees which constitute over 70% of budget. Most of the remaining 30% is used in administrative and maintenance costs with very little amount left for education related expenses. All major revenue such as student fees, exam fees are collected directly by the college while all major expenditure including some of the infrastructural development works are directly disbursed from the funds. This indicates that private MPO listed colleges are autonomous with respect to financial management and there is a high level of independence on the part of the college governing body in making decisions in this regard.

88. **Private colleges are regulated by the National University for delivering its undergraduate and graduate academic programs where the number of students passing examinations is used as the major performance criterion for each college.** Private colleges have leverage in terms of internal administration, fixing fees within limits imposed by NU and enrollment of degree (pass) students. NU sets enrollment limits for Honors courses but not for bachelor (pass) level. NU also oversees the establishment of the governing body in private colleges. The VC of NU nominates the chairman of the governing body. The NU also has a representative in the governing body. Standards for staff recruitment are specified by the NU and the governing body. Appropriate procedures, including a utilization of a recruitment committee with representation from NU and DSHE, must be followed. MoE has some role in respect of reorganization and dissolution of governing bodies. But recruitment is heavily influenced by political considerations. Contractual staff can be dismissed by the governing body but for permanent staff it needs approval from NU. These procedures reflect the regulatory role of NU over the management of private colleges.

89. **Salary subvention as a mode of financing private colleges.** The following matrix demonstrates the gross and net amount of MPO disbursed in the college sector from 2007 to 2010. It shows an increasing trend of MPO over the years and a major shift from 2009 to 2010 which is more than 1.5 times increase. A change in government salary scale is the reason for such a jump from TK.8,225 million to Tk.12,743 million. Currently (2011/2012) the amount disbursed as salary subvention to all secondary schools, madrasahs, higher secondary and graduate colleges is nearly 50% of Ministry of Education's annual revenue budget. In comparison only 5% of the MoE's revenue budget is allocated to public colleges.

³³ Only one teacher in a subject is entitled to MPO in a graduate program (i.e., three years long Bachelor pass) offering college. If a college offers 10 subjects but has five teachers for each subject totaling 50, only 10 teachers will be entitled to receive MPO, one from each subject.

³⁴ Private colleges are governed and regulated by a governing body. Nearly 90% colleges have governing body in the form of organizing or managing or ad hoc or special committee in 2009 and more than 50% committees are ad hoc.

Table 10: Disbursement of MPO Subvention (In BDT million)

Year	Salary	Welfare Trust (-)	RTD. Benefit (-)	Net Amount to inst.	+/-
2007	7610	139	338	7133	--
2008	8009	133	266	7610	7%
2009	8621	132	264	8225	8%
2010	13532	263	526	12743	55%

Source: EMIS of DSHE, Dhaka

90. **Current MPO approval process entails a number of systemic loopholes.** First, there is no scope for double-checking the veracity of the claims made by individuals. Second, the existing process does not address the issue of changed circumstances. For example, a college might have an MPO listed teacher for a subject in which there is no available student. Third, the Directorate of Inspection and Audit (DIA), responsible for checking the financial affairs of colleges, does not have any formal communication window with the MPO approving Non-Government College wing of DSHE. Thus, even if DIA identifies any discrepancy or wrongdoing, the Non-Government College wing is unlikely to take action because of the information gap. This lack of coordination and the information gap leads to huge misuse of MPO subventions.

91. **MPO disbursement system supposedly imposes an incentive to maintain high level academic performance in terms of exam results of the students to ensure MPO flows.** Failing to meet minimum performance criteria in a period of 5 years or so may result in withdrawing or discontinuity of MPO support. Evidence shows that less than 2% colleges have had their MPO suspended for their poor academic performance. This is to some extent politically biased and quite possibly short-lived. The present MPO structure of public financing of private colleges is embedded in a chain of corruption spanning different levels. It starts from review and approval of application of new colleges by NU for government recognition to getting MPO support for nominated teaching staff through DSHE's college wing. Once approved, the colleges continue to receive subventions indefinitely without any link to academic performance.

6. Governance and Management of National University and Affiliated Colleges

92. The main governance functions of the National University vis-à-vis the affiliated colleges are related to affiliation, admission, examinations, curriculum management and teacher recruitment and development. As a whole, the National University system accounts for roughly about 80 percent of the whole tertiary sector of the country. Much of the success of the tertiary sector depends on good governance of the National University system.

93. This section first describes governance and management of NU and affiliated colleges, the regulatory structure(s) relevant to college education, and the accountability mechanism in place, and later lays out the key challenges faced by the system.

6.1. Governance of the National University

94. As a public university, the governance structure and system of NU revolves around Vice Chancellor, Pro-Vice Chancellor, the Senate, the Syndicate, the Academic Council, the Finance Committee and the Planning and Development Committee. The Vice-Chancellor is the “whole time principal academic and administrative executive officer” of the University and ex officio Chairman of the Senate, the Syndicate, the Academic Council, the Finance Committee and the Planning and Development Committee.

95. The VC, as the chief executive, is authorized to take measures for implementation of decisions of the Senate, the Syndicate and the Academic Council. The Vice-Chancellor is empowered to appoint teachers (excepting professors), officers and employees on a temporary basis ordinarily for a period of not more than six months and s/he must inform the Syndicate about such appointments.³⁵

96. NU may have one Pro-Vice-Chancellor or more. They are expected to perform duties and exercise powers determined by the Statutes and University Regulations or assigned to them by the Vice-Chancellor³⁶. The Treasurer is the custodian of the University funds. The Treasurer exercises general supervision over the funds of the University and advises the university on financial policies, and is responsible for the presentation of the annual budget estimates and statement of accounts. The *Registrar* is the chief administrative officer. S/he acts as Secretary of the Senate, the Syndicate and the Academic Council and maintains contact with the Deans regarding their plans, programs and schedules. The *Inspector of Colleges* is responsible for “all matters concerned with colleges” and shall perform such other duties as prescribed by the Statutes and the University Regulations or directed by the Vice-Chancellor. The *Controller of Examinations* is responsible for all matters related to administering examinations.

97. The NU has the following three academic units or faculties: (i) School of Undergraduate Education, (ii) Postgraduate Education, Instruction and Research Center, (iii) Curriculum Development and Evaluation Center, each headed by a Dean entrusted with specific tasks.

³⁵ This power, in the past, allegedly was the source of many malpractices. The University is still suffering from the effect of irregularities in appointments.

³⁶ At present there is one Pro-VC.

6.2. Governance of colleges

98. While both public and private colleges provide two to six years of higher education at post-higher secondary level, the governance systems for public and private colleges are somewhat different. The public colleges are administered through the government service rules. Teachers are recruited through Public Service Commission. They are paid salaries according to the government salary scale. Although a governing body (GB) is supposed to be in existence at each public college, none of them has a GB. Administrative decisions are mostly taken by the college principal. On the other hand, the private colleges, once certified by and affiliated to the National University, would principally be governed by their Governing Bodies under certain rules. Both the National University and the Directorate of Secondary and Higher Education (DSHE) would have representation on the committee to recruit teachers in the private colleges and teachers have to be recruited from a pool of teachers pre-certified by the Nongovernment Teacher Registration and Certification Authority (NTRCA).

99. Three areas of governance of both public and private colleges are clearly earmarked under the jurisdiction of the National University. These are: admission, curriculum and examination. The National University also plays a much bigger role in other aspects of governance of private colleges, particularly in affiliation, disaffiliation and supervision.

6.3. Affiliation of Colleges

100. A college is eligible for affiliation to the University subject to satisfying certain conditions and approval of the Syndicate. These conditions include, among other things, (i) having a Governing Body; (ii) strength and qualifications of teaching staff; (iii) college building being suitable for academic and administrative activities³⁷; (iv) facilities for student residence, and other facilities for physical and general welfare of students and teachers like sports and games; (v) library facilities; (vi) laboratories for colleges seeking to provide instruction on experimental science; (vii) residence for Principal and teaching staff; (viii) financial resources to provide for continued maintenance; and (ix) absence of any other affiliated college within a radius of eight kilometers except in the metropolitan, industrial and municipal areas.

101. The National University reviews and approves the applications of all colleges that seek Government recognition every year. Applications are reviewed by the various bodies of the National University against minimum criteria for facilities, teaching staff, library, laboratory and other facilities mentioned above. NU maintains a standard benchmark for all these criteria.³⁸ The Syndicate is the final authority to grant provisional recognition, based on recommendations from the Academic Council, for a maximum period of three years, subject to reconfirmation based on performance of the institution. Approval allows the institution to admit students and have the students sit for examinations. The Syndicate can de-affiliate an institution or a program of an institution based on recommendations of the Academic Council. The Academic Council can make such recommendations on the basis of the performance of the institution/program.

102. Every affiliated college is also subject to regular inspection by a person or persons nominated by the Inspector of Colleges or by anyone appointed by the Vice-Chancellor or the Syndicate. The Inspector of Colleges is also supposed to make follow up review of the institution for renewal of affiliation. However, due to shortage of person-power, resources and a long term plan of the Office of the Inspector

³⁷ Other than the space, there is no such given criterion which qualifies “suitable”.

³⁸ The criteria have been laid out in the Affiliation to the National University (Amendment) Regulations 2010.

of Colleges such review visits are reportedly limited in number and frequency and more sporadic than systematic.³⁹

6.4. Governing Bodies of Affiliated Colleges

103. The Governing Bodies (GB) of the affiliated colleges are governed by the National University (Governing Body of Affiliated College/Educational Institution) Amendment Regulations 1998. According to the Regulations, a 13-member Governing Body chaired by a person nominated by the Vice Chancellor of the National University would run the internal affairs of the college for a period of three years. The Principal of the college is the member-secretary of the GB. In practice, the Vice-Chancellor nominates one person from a panel of three potential candidates suggested by the college. Political influence in preparing this panel of three potential candidates and even final nomination is the norm.

104. Interestingly, while all affiliated colleges are supposed to have Governing Bodies, the Government colleges, which are also affiliated to the National University, do not have any Governing Bodies. The Regulations also have provision for an *ad hoc* committee in case a full-fledged Governing Body cannot be formed. The reasons for not having a Governing Body, as it transpired from interviews, are litigation, internal conflict among the locals, delay in the process after a higher secondary college transforms into a post-higher secondary college etc.. Despite strict temporal limits for *ad hoc* committee existence, some 21 percent of the affiliated colleges in non-metropolitan areas and 13 percent colleges in metropolitan areas continue to have *ad hoc* committees beyond the accepted duration.⁴⁰

6.5. Subvention to affiliated Colleges

105. The colleges offering graduate programs would have one teacher from several teachers in one subject supported by salary subvention... This subvention entirely managed and directly disbursed from the Directorate of Secondary and Higher Education and administration of subvention is solely the responsibility of DSHE and the NU has nothing to do with this.

106. On the other hand, numbers of teachers required in each subject for colleges seeking affiliation to the National University are a minimum of three for bachelor (Pass) courses and a minimum of seven for bachelor (Honors) and Master's programs. While the National University sets the requirements for affiliation, it does not have the responsibility to provide financial support to the colleges once affiliated. The colleges are expected to pay the teachers from their own tuition and other incomes.

6.6. Issues for consideration

Governance Practices in Colleges

107. **Limited autonomy of Colleges:** While the colleges take routine decisions under the guidance of the MoE, DSHE and NU, government colleges do not have much functional autonomy in taking non-routine and substantive policy decisions. They operate basically like other government entities. The Governing Bodies of the private colleges to a certain extent enjoy some working/ functional autonomy in carrying out some of the development work as postulated under the National University (Governing Body of the Affiliated Colleges/Institutions) Amendment Regulations 1998. The governing bodies of the private colleges are in charge of recruiting teachers through a five member recruitment committee. They can recruit teachers only from a pool of potential teachers pre-certified by NTRCA. In addition, none of the colleges—public or private— has an authority over curriculum design, administration of

³⁹ Revealed from the case studies on governance.

⁴⁰ College Survey

examinations, awarding of degrees and student admission. These responsibilities rest entirely with the National University. The colleges can apply for setting up new academic programs, but they need to be examined and approved by the National University.

108. ***Acute shortage of teachers due to inept teacher recruitment process:*** Delays in recruitment pose serious problems for government colleges. According to DSHE, it usually takes around two years to complete the recruitment process between MoE and Public Service Commission and by then more vacancies have been created. Government colleges then suffer from a chronic shortage of qualified teachers with vacant posts are not filled in a timely fashion.

109. ***While some private colleges have been able to produce better outcomes based on innovative initiatives with their better-off resources especially in the metropolitan areas, serious concerns remain about the internal governance of many of the affiliated private colleges:*** The case studies from four colleges suggest that the frequency of meetings of the Governing Bodies varies from 3 to 4 meetings a year. However, the college survey suggests that for 54% of the colleges the frequency is between 2 and 5 meetings a year. Although the decision making process within the Governing Bodies is expected to be participatory in practice, there have also been a number of allegations of political influences in the decision making process by the Board. Even the nomination of the Chair by the Vice Chancellor of the National University allegedly has not been an effective safeguard against political influence. This is exacerbated by the preferences placed by some colleges to have someone as Chair who is politically influential, particularly from the ruling party as it would help the colleges sail through bureaucratic bottlenecks either at DSHE or MoE. While the colleges look at the immediate dividends, they need also be mindful of the far-reaching negative effects of political influence on private colleges.

110. Political influences are also evident in appointment of teachers. Despite the fact that NTRCA pre-certification is needed, selection on the ground of political allegiance is still an issue in private colleges. Reportedly, there were also instances of producing fake NTRCA certificates.

111. ***Adverse effect of students' politics on college governance cannot be underestimated:*** It is a commonly-held belief that the present nature of student politics has significantly affected college governance, particularly in terms of administration of examinations and actual number of class days. The recurring episodes of local eruption of violence on a day of examinations, administered centrally from NU, have had enormous negative logistical and academic consequences for the college system as a whole.

112. ***Weak accountability and monitoring mechanism:*** Major responsibility for ensuring the accountability of colleges rests with the Inspector of Colleges, NU. There are 14 areas of monitoring and inspection entrusted to the office of the Inspector of Colleges which draws support from other wings of the University and also from other colleges. The inspection process has been viewed as unsystematic and sporadic by the colleges. This includes the monitoring of the quality aspects of college education. No shared well-defined schedule exists and indeed may not occur for substantially long periods.

113. Internally within colleges, the Governing Body is expected to monitor proper functioning of a college and to monitor whether the college is keeping its proper records. The National University requires the colleges to submit a number of reports—both annual and need-based—for reconfirmation of affiliation. Affiliation of a program of a college is most often needed to be reconfirmed every year. Failure to do so may result in de-affiliation. While de-affiliation of a whole college is rare, every year some programs of some colleges are de-affiliated because of not fulfilling the set criteria. In most cases, these programs are re-affiliated once the colleges meet the criteria.

114. Another mechanism is internal audits and these are found to be done informally and characterized by inadequate documentations. External audit in private colleges is done by the Department of Inspection

and Audit (DIA) under DSHE. Reportedly, the external audit is also not done regularly. For government colleges, external audit is conducted by Local and Revenue Audit Directorate of the government.⁴¹

115. An accountability mechanism for teacher performance is also missing. The linkage between government salary subvention, known as Monthly Pay Order (MPO), and performance is very weak and almost unenforceable. Inspection in this regard from DSHE is perfunctory, if not inconsequential.

116. In terms of financial accountability, despite the fact that NU has restricted the maximum fee to be charged by private affiliated colleges, the colleges often charge higher fees on different pretexts to increase their own income. On the other hand, the teachers augment their income by providing private tuition sometimes neglecting class room teaching. While private tuition is mostly provided at higher secondary level, it affects the teacher's willingness to be more serious about classroom teaching at all levels.

117. ***Lack of strategic vision and planning at affiliated colleges:*** The government colleges present a regular development budget to the Ministry in a prescribed format. However there is no guarantee that the proposed development grant or plan will be approved. For the private colleges, in practice, there is no system of annual or long term plan except for some big private colleges in metropolitan areas which have well formulated development plans for expansion of the physical and academic infrastructures. However, most of these colleges, particularly the ones where the academic programs are still at an early stage, hope to expand. In addition, neither the private colleges nor the government colleges have any academic staff development plan. The colleges select teachers for training fully on an ad hoc basis as and when a training nomination is asked for by NU or NAEM.

Governance Issues at the National University

118. ***Inadequate institutional structure:*** Most of the National University matters are administered from its main campus at Gazipur. Administering the admission of nearly half a million students and the examination of some 400 thousand students annually and supervising the propriety in functioning of 1,547 colleges constitute too huge a task for a centralized management from one location. Admission and examination centers are scattered all over the country. Many of the activities related to admission and examination are administered online. However, administering actual tests demands close supervision. The National University uses the whole college education system for this purpose. Recently, the National University has taken the initiative to delegate its activities to six regional offices. It appears to be a step in the right direction. However, staff deployment and capacity building for these regional offices are issues that have hindered implementation progress.

119. ***Capacity:*** Despite many appointments in the recent past, some of them allegedly irregular and, therefore, recently decreed to be illegal, the National University suffers from staff constraint in departments where they need the highest person-power. The Office of the Inspector of Colleges is one such place. Despite the fact that the organogram has provision for 180 persons, only 43 staff members are at work at the office of the Inspector of Colleges. The main contingent of staff involved in actual inspection of colleges comprises four Deputy Inspectors (against nine in the organogram) and 18 Assistant Inspectors, none of them from a teaching background. Occasionally, even the seven Section Officers (against 45 in the organogram) are given a check-list to conduct routine inspection. The Office of the Inspector of Colleges does not have any capacity of its own for academic supervision of the colleges for which they seek support from teachers of the public universities on an ad hoc basis. Evidently, the National University is not professionally equipped for inspection of 1490 colleges which also involves academic oversight.

⁴¹ One of the ten audit directorates under the Comptroller & Auditor General of Bangladesh.

120. Similarly, admission to Bachelors (Honors) programs is managed by the Dean's Office of the School of Undergraduate Education of the National University. While the shift to online admission has eased the burden to a large extent and has taken care of many anomalies and undue influences on the admission processes, much of the propriety of the admission process depends on close supervision of the actual admission tests which take place at remote areas.

121. **Decision-making:** The decision making process at the National University is somewhat centralized without, reportedly, adequate consultation with colleges—the entities that are directly affected by NU decisions. In some cases, such as dates for examinations and admission tests this is understandable, but some input from colleges would be desirable as college premises have multipurpose uses. Coordination with DHSE and education boards in this regard would also be useful.

122. **Image crisis:** Both the colleges and the National University receive bad press quite frequently. The recent spell of employees' strike at NU, annulment of the appointment of some 1100 employees on the ground of anomalies in employment, blatant political considerations in many administrative decisions and numerous problems of irregularities of various kinds at the colleges have created an image crisis for the National University system. On top of these, college education is always considered second grade next to university education at tertiary level. This obviously creates a social bias against the National University affecting the quality of student cohorts and teaching staff entering the NU system despite the fact that the NU system constitutes some 82 percent of the total tertiary education system. Transparent governance at NU and better education in the colleges, supported with adequate financial support, might help correct this situation.

123. **Control vs. Support:** NU acts very much as a “control oriented regulatory body” and “controller of examinations.” The very term “inspection” is perhaps now obsolete in education. NU, as an apex body, is expected to provide strategic direction and support to the affiliated colleges. Financial resources are not available to colleges except for salary subvention to a small proportion of teachers. NU has carved out for itself an extremely limited role in delineating a strategic vision, providing and implementing a quality assurance framework, and following this up by program interventions. Further monitoring is not seen as a tool to support and improve the performance and quality of college level education: rather it is used largely as a tool to penalize those who fail to adhere to regulations. A change in the perception of the regulatory culture would entail a more intensive level of engagement with the understanding that monitoring needs to go beyond the function of controlling the colleges.

124. **Data Base:** The National University manages education for four-fifths of the students in tertiary education. Still, surprisingly, the university does not have any central database to support decision-making for all its policies and activities. Data on examinations, admission, affiliation/de-affiliation, curricula are all to be found at different locations. The University publishes annual report irregularly and even the published report does not present relevant information and data. A university playing such a central role in tertiary education, and expected to be a key player in the development of tertiary education policies and strategies, should have a robust database either at its own disposal, or if so decided, at BANBEIS from where information could be easily retrieved by all players in tertiary education.

7. Policy Options

125. The policy options presented here⁴² are premised on the issues and discussions in the preceding chapters. The National University and its 1,547 public and private colleges comprise too complex a web to expect a linear line of development to work. The coordination among the key players – MoE, NU, UGC, DSHE and representatives of public and private colleges – and their participation in charting out the strategic plan and implementation/operational modalities would be key to the success of this endeavor which would have to take place in stages.

126. The policy options presented below fall into five broad areas of reform: 1) strengthening the system and service delivery, 2) expanding in response to market and future demands, 3) improving governance and management of the college subsector, 4) strengthening performance through financing reforms, and 5) improving the quality of affiliated colleges.

A. Strengthening the System and Service Delivery

1. **Advance the Government’s vision – fully establish NU Regional Campuses and decentralize delivery of selected services.** In order to institutionalize activities recently delegated to the six Regional Campuses, all parties need increased clarity regarding divisions of responsibility with regard to the following: a) types of degrees offered at each institution, and b) procedures for examinations, admissions, curriculum development, teacher training, and quality assurance, and coordination protocol.
2. **Strengthen capacity of Central NU and Regional Campuses core functions.** Once the division of responsibility is clarified, needs assessment for capacity building activities should be carried out through a consultative process with working groups of key stakeholders capable of mapping the technical, human, and financial resource gaps that will need to be filled in order to strengthen system and service delivery.

B. Expanding in Response to Market and Future Demands

3. **Develop a strategy for how the system will respond to projected enrollment demand, especially for: a) the rural and disadvantaged/underserved regions, and b) the subject areas that have high market demand (i.e. engineering and technology).**
4. **Develop a phased expansion plan with incentives and assistance for opening market-relevant courses.** The plan should include cost implications developed from market research of enrollment projections. Incentives and assistance may need to be offered to colleges for opening market-relevant courses, enhancing science programs to attract more students, and establishing engineering and technology colleges.

⁴² The options outlined in this chapter reflect discussions with the Bangladesh University Grants Commission. These options will be formulated with greater specificity after discussions with The National University and representatives from public and private colleges.

C. Improving Governance & Management of the College Subsector

5. **Clarify roles and responsibilities while balancing agencies' coordination functions with their domain specializations.** Major decisions that need to be made relate to the management of higher secondary classes and the need for DSHE to focus exclusively on this level, leaving college level to NU and the emerging structural changes.
6. **Spearhead the development of a medium-term Strategic Plan which includes a vision and modalities to reach the vision's goals.** The plan should be developed in consultation with relevant stakeholders while taking projected demands for the sub-sector into account.
7. **Increase autonomy for the better performing colleges to spur innovation and strengthen quality of education and management.** The Government may want to develop a set of evaluation criteria which can be used to assess management competencies of colleges before awarding different levels of autonomy in the areas of academic, financial, teacher recruitment, etc.
8. **Overhaul accountability and monitoring mechanisms.** Greater autonomy should be balanced with a proper accountability mechanism.
9. **Strengthen management capacities through the development of a management information system to improve accountability, transparency, administration, and management.** A central college database should be developed at NU with data to be collected at the Regional Campuses, made publicly accessible, and linked to the national education database at BANBEIS. The robust central database should contain data on examination, admission, affiliation/de-affiliation, teaching forces, and academic matters (i.e. programs, curricula, teaching and learning facility, etc.) which would be essential to support decision making for its policies and activities.
10. **Enhance internet connectivity in individual colleges in order to improve management and administration as well as to support the modernization of teaching and learning.**

Box 3: Raising the Connectivity Capacity of the Higher Education Sector

The Bangladesh Higher Education Quality Enhancement Project (HEQEP) is supporting the establishment of the Bangladesh Research and Education Network (BdREN) which provides high speed connectivity within the country and internationally. BdREN allows teachers, students, and researchers of both public and private sectors to access the latest knowledge and facilitate collaborative research across institutions of higher learning.

With the support of HEQEP, BdREN aims to: a) provide access to more than 3,500 km of fiber optics around the country, b) establish international partnerships to aid in technical support functions, c) install BdREN equipment, d) build campus networks, e) strengthen international academic connectivity, and f) create various applications such as video conferencing, digital video transport system (DVTS), data computing, visualization/image modeling, and e-learning.

BdREN currently connects six universities, MoE and UGC. It aims to connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country in phases. BdREN is connected to global networks in Eurasia (TEIN3), USA (Internet 2), Ireland (HeaNet), Continental Europe (GEANT 2), and Asia-Pacific region (APAN). Users connected to BdREN are able to communicate and collaborate with their counterparts over the virtual work space with improved network performance and lower network latency.

The Project has helped establish a digital library facility and the UGC Digital Library (UDL) which facilitates access to the global repository of knowledge. The UDL has been established with 28 public and private universities. The UDL subscribes to electronic-resources from international electronic journals such as ACM, Emerald, and JSTOR.

<http://www.bdren.net.bd/>

D. Strengthening Performance through New Financing Methods and College-Level Financial Reforms

11. **Increase funding for education in general and higher education sector in particular to at least 1% of GDP by FY2010 to meet the increasing demand for higher education and to improve the quality of public universities and colleges** while strengthening the capacity of the sector to improve its efficiency, governance and management.
12. **Pilot multiple funding approaches: a) formula, b) performance-based and c) competitive.** In the poorest performing colleges, the current mode of historical allocation might have to continue for the present. Colleges phasing in new funding modalities could apply different schemes such as making funding based on enrollment, the pass rate, or increase in science and engineering students. Special “additional funding” formulas could be established to encourage quality and provide incentives to high performing colleges by funding institutions on the basis of the unique performance measures given the differences in size, quality of teaching-learning environment, quality of academic staff, academic infrastructure, and financial strength, etc. A central agency would record the experiences and share lessons learned with other colleges.

13. **Establish short- and long-term student aid financing mechanisms to increase equity and access.** In most other countries scholarship/grant allocation criteria are linked to either academic performance or socio-economic status. Bangladesh has both types of allocation at the government level but the total number of recipients is small in size given the socio-economic context of the country. Moving towards demand-driven higher education accessibility for everyone as per National Education Policy 2010 also requires a sizable government budget for scholarship/grant etc. Short-term tools to increase equity include scholarships, grants, and other financial aid for meritorious students coming from extremely poor families. Long-term tools to increase overall population access include a student loan scheme operated in partnership with commercial banks.
14. **Give more financial autonomy to Government colleges** – as a way to encourage fund raising – while implementing strong financial auditing practices and ensuring adequate checks and balances and measures to strengthen college-level financing management.

E. Improving the Quality of Affiliated Colleges

15. **Develop a phased plan for the college-sector quality assurance framework while sensitizing and assisting individual colleges to set up voluntary quality assurance schemes.** Quality improvement for the college subsector will call for major overhauls in curriculum planning and renewal including: a) the distribution of instructional resources; b) training, upgrading, supervision and support of academic staff; c) investment in a systemic performance monitoring scheme with appropriately trained and qualified personnel; and d) a review and overhaul of annual examination practices taking into consideration the potential structural reforms. While revamping the quality of the college system will be a long-term goal, NU and MOE will need to articulate a step-by-step improvement plan for each area in the Strategic Plan. In the meantime, NU should support the colleges to build quality assurance culture and practice at each institution. They may want to reach out to those public universities who are currently implementing quality assurance scheme (self-assessment) on their campuses with the funding provided by the Academic Innovation Fund⁴³ for their support.
16. **Include teacher performance in the comprehensive reform initiative.** The college sector needs to make teaching and career paths at the college level more attractive through the following methods: a) better remunerations and benefits; b) uniform terms of service conditions and salary scale; c) career progression supported with professional development opportunities; and d) consistent and transparent recruitment and deployment processes. The Government should set up a special committee with representatives of all relevant entities and government agencies (i.e. NU, MOE, NTRCA, PSC, public and private colleges) to review the current practices and develop proposed reforms and a roadmap.
17. **Allocate additional funds for the development and implementation of training programs for various levels of staff at NU and affiliated colleges.** The government should source trainers from the private sector, business enterprises and private universities in addition to public universities, NU, and NAEM. International online programs, international and national open learning modes, and internships should also be tapped to help provide a rich array of offerings and training modalities.

⁴³ http://www.heqep-ugc.gov.bd/index.php/home/Component_details/1/1

Annex 1: Key Data Sources and Data Limitations

Key Data Sources:

- Household Income and Expenditure Survey (HIES) of 1996, 2000, 2005 and 2010 by Bangladesh Bureau of Statistics (BBS)
- College survey 2010
- University Survey (a part of Academic Innovation Fund Satisfaction Survey) 2010
- Bangladesh Bureau of Education Information and Statistics (BANBEIS), Ministry of Education data based on 2008 census
- Institution visits – Teams of consultants visited a number of colleges
- Focus group discussions with stakeholders including students, teachers, administrators, employers and local think tanks.

This study benefits from several sources of information including several rounds of Household Income and Expenditure Survey (HIES) conducted by Bangladesh Bureau of Statistics (BBS) and institutional data from Bangladesh Bureau of Education Information and Statistics (BANBEIS). The BANBEIS is an institution attached to the Ministry of Education (MoE), collects, preserves and disseminates relevant information from educational institutions of all levels including universities and tertiary level colleges.

College Survey 2010 & University Survey 2010:

Nevertheless, institutional sources of data do not provide enough information which could be used to analyze various dimensions of tertiary level education in Bangladesh. Therefore, in order to fill this data gap, surveys of colleges and universities were designed as supplementary data sources for the study. The survey collected information both on the institution and the students and teachers.

Universities and tertiary level colleges were surveyed separately. The college survey randomly selected 301 tertiary level colleges, both public and private, spread around the country. Basic information on the colleges, such as, history of the college, number of students and teachers by subjects/disciplines and grades, assets, sources of income, were collected in the college level survey. From each college, one class room is randomly selected and the students of the class rooms were surveyed. This student level survey collected information on educational and socio economic back ground of the students. From the universities, again randomly selected classrooms from one or several randomly selected departments have been surveyed with the questions as the college student survey. These two student level data will allow comparing students from different types of universities and the colleges in terms of their socio-economic and educational background which will allow checking whether equity is an issue in accessing higher education in Bangladesh⁴⁴.

In total, 301 tertiary level colleges, 36 university departments, 7810 college students and 1871 university students were surveyed. The college sample covers all types of colleges from all the divisions. Hence, the survey results should be regarded as nationally representative. The university sample should also be regarded as nationally representative as all types of universities (public, private, large and small) and disciplines (science, arts, business etc.) are covered. However, though the class rooms are randomly selected, selection of students may be subjective as participation in the survey by the students were self-selection basis – only the attended students in the particular class were surveyed and the students were free to step out of the class rooms if they did not want to participate.

⁴⁴ Annex 2 presents the questionnaires used for the survey.

Table 11: Description of the Colley Study Sample

	N of Institutions	N of Students		
		Male	Female	Total
Govt. Rural College	17	206	217	423
MPO Rural College	188	1,682	2,283	3,965
Non-MPO Rural College	5	63	106	169
Govt. Urban College	34	738	992	1,730
MPO Urban College	53	583	835	1,418
Non-MPO Urban College	4	68	37	105
Total Colleges	301	3,340	4,470	7,810
Public University	15	1,177	522	1,699
Private University	5	132	41	173
Total Universities	20	1,309	563	1,872

Source: College survey 2011, Author's Calculation

Data Limitations:

The expectation is that BANBEIS, being the data wing of the Ministry of Education (MoE), would be the major source of information for post-primary level of education together with University Grants Commission (UGC) which is another source of information for tertiary level of education. However, basic information provided by these two agencies under the same ministry are inconsistent and do not match. For example, while BANBEIS reports a total enrolment of 1.5 million in the National University Colleges, UGC reports the total as only 0.9 million. Such inconsistencies would add to the complexity of the exercise.

In addition, given the current status of monitoring and evaluation at institutional and national levels, the absence of systematic documentation and reporting on the sub-sector, and less than adequate research, the identification of policy improvement of college-level education is a tremendous challenge.

No information was found during the study on systematic learning assessment. Final exams are the only source of knowing how much a student has learned. Unfortunately these exams only assess rote learning and cannot indicate anything about the skill of a student.

Apparently, no tracer study has ever been conducted by anybody.

Annex 2: Education System in Bangladesh

Grade (Class)	Age	Level	Certificate Diploma/Degree	Teaching Institution	Apex Regulatory Institution
Pre-primary	3-5	Kindergarten Nursery		Kindergarten	Directorate of Primary Education
I	6-10	Primary Ibtedayi/Maktab		Primary School Ibtedayi Madrasa	Directorate of Primary Education Madrasa Education Board Quomi Madrasa Board
VI-VIII	11-13	Junior Secondary Junior Madrasa/ Vocational-Technical	Trade Certificate (for Vocational)	Secondary school Vocational Technical Institute Aliyah Madrasa Quomi Madrasa	Directorate of Secondary & Higher Education Board of Technical Education Madrasa Education Board
IX-X	14-15	Secondary Vocational-Technical	Secondary School Certificate (SSC), Dakhil, SSC Vocational Dakhil Vocational	Secondary School Aliyah Madrasa Quomi Madrasa Technical School & College	Directorate of Secondary & Higher Education Madrasa Education Board Board of Technical Education Board of Secondary & Higher Secondary Education
XI-XII	16-17	Higher Secondary Vocational-Technical	Higher Secondary Certificate (HSC), Alim, HSC Vocational, HSC Business Management	Secondary School & College, Aliyah Madrasa, Technical School & College	Directorate of Secondary & Higher Education (DSHE) Madrasa Education Board, Board of Technical Education, Board of Secondary & Higher Secondary Education, Directorate of Technical Education
XIII-XVI	18-20	Bachelor, Diploma	Bachelor (pass & honors) Fazil Diploma in Engineering/Agriculture/Textile/Fisheries/Forestry/Marine	College, University, Aliyah Madrasa Polytechnic Institutes	Directorate of Secondary & Higher Education (DSHE), Madrasa Education Board, Directorate of Technical Education, University Grants Commission
XVII	21-22	Graduate	Master's Kamil M Sc (Engineering)	College, University, Aliyah Madrasa	Directorate of Secondary & Higher Education (DSHE), Madrasa Education Board, University Grants Commission of Bangladesh
XVIII	23-25	Master's	M Phil	University	University Grants Commission of Bangladesh
XX-XX	23-25	PhD	PhD		

Annex 3: SSC and HSC Equivalent Examinations Graduate Numbers and Pass Rates (2007- 2012)
A: SSC and Equivalent Examinations Graduate Numbers and Pass Rates (2008-2012)

Board		2008			2009			2010			2011			2012		
		Total Student	Pass	%	Total Student	Pass	%	Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%
	Male	112,944	89,699	79.42	121,127	86301	71.25	137,198	108680	79.21	150,428	129,009	85.76	161,167	140,059	86.90
	Female	105,953	80,632	76.1	118,439	79269	66.93	134,325	103081	76.74	150,143	125,359	83.49	163,329	138,833	85.00
	Total	218,897	170,331	77.81	239,566	165570	69.11	271,523	211761	77.99	300,571	254,368	84.63	324,496	278,892	85.95
Rajshahi	Male	107,325	70,798	65.97	60,343	36381	60.29	70,084	60005	85.62	67,749	54,999	81.18	69,011	60,775	88.07
	Female	99,925	63,694	63.74	53,436	30076	56.28	63,811	54624	85.60	62,246	49,412	79.38	62,954	55,784	88.61
	Total	207,250	134,492	64.89	113,779	66457	58.41	133,895	114629	85.61	129,995	104,411	80.32	131,965	116,559	88.33
Comilla	Male	38,879	29,512	75.91	43,734	33529	76.67	49,746	42129	84.69	55,479	49,395	89.03	59,495	52,558	88.34
	Female	37,895	26,530	70.01	44,580	30737	68.95	52,304	40565	77.56	60,719	50,362	82.94	69,096	57,573	83.32
	Total	76,774	56,042	73	88,314	64266	72.77	102,050	82694	81.03	116,198	99,757	85.85	128,591	110,131	85.64
Jessore	Male	55,725	40,861	73.33	55,540	38870	69.99	63,451	51147	80.61	65,703	55,794	84.92	67,827	59,734	88.07
	Female	49,571	34,348	69.29	50,724	33401	65.85	59,568	46256	77.65	62,132	51,636	83.11	63,936	55,113	86.20
	Total	105,296	75,209	71.43	106,264	72271	68.01	123,019	97403	79.18	127,835	107,430	84.04	131,763	114,847	87.16
Chittagong	Male	27,678	20,652	74.62	30,422	22050	72.48	33,268	25113	75.49	36,911	29,572	80.12	39,969	32,746	81.93
	Female	27,324	19,292	70.6	31,542	21082	66.84	35,118	24338	69.30	40,414	30,949	76.58	45,798	34,976	76.37
	Total	55,002	39,944	72.62	61,964	43132	69.61	68,386	49451	72.31	77,325	60,521	78.27	85,767	67,722	78.96
Barisal	Male	24,767	17,572	70.95	24,021	16317	67.93	27,423	21495	78.38	30,181	23,976	79.44	31,490	27,492	87.30
	Female	23,887	15,886	66.5	24,474	15509	63.37	27,919	19814	70.97	31,409	24,246	77.19	31,889	27,625	86.63
	Total	48,654	33,458	68.77	48,495	31826	65.63	55,342	41309	74.64	61,590	48,222	78.3	63,379	55,117	86.96
Sylhet	Male	14,746	8,378	56.82	17,424	14065	80.72	19,088	15553	81.48	21,927	18,583	84.75	25,862	23,893	92.39
	Female	16,990	8,722	51.34	19,984	15378	76.95	22,145	16783	75.79	26,551	20,795	78.32	32,514	29,686	91.30

Board		2008			2009			2010			2011			2012		
		Total Student	Pass	%	Total Student	Pass	%	Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%
	Total	31,736	17,100	53.88	37,408	29443	78.71	41,233	32336	78.42	48,478	39,378	81.23	58,376	53,579	91.78
Dinajpur	Male				51,681	34261	66.29	58,540	42944	73.36	62,662	49,273	78.63	63,713	55,889	87.72
	Female				50,420	30652	60.79	58,589	41033	70.04	61,996	47,306	76.3	60,094	52,020	86.56
	Total				102,101	64913	63.58	117,129	83977	71.70	124,658	96,579	77.48	123,807	107,909	87.16
Madrasah Board	Male	98,721	83,129	84.21	100,668	88818	88.23	111,432	99194	89.02	124,994	106,912	85.53	147,405	132,637	89.98
	Female	81,864	65,057	79.47	85,058	70626	83.03	98,987	83237	84.09	112,530	90,787	80.68	125,660	108,935	86.69
	Total	180,585	148,186	82.06	185,726	159444	85.85	210,419	182431	86.70	237,524	197,699	83.23	273,065	241,572	88.47
Tech. Education Board	Male	57,262	35,888	62.67	51,879	36618	70.58	55,323	45711	82.63	59,403	48,221	81.18	66,230	53,172	80.28
	Female	25,113	15,913	63.37	23,178	16598	71.61	22,656	18790	82.94	23,578	19,300	81.86	24,940	20,394	81.77
	Total	82,375	51,801	62.88	75,057	53216	70.90	77,979	64501	82.72	82,981	67,521	81.37	91,170	73,566	80.69
Grand Total	Male	538,047	396,489	73.69	556,839	407210	73.13	625,553	511971	81.84	675,437	565,734	83.76	732,169	638,955	87.27
	Female	468,522	330,074	70.45	501,835	343328	68.41	575,422	448521	77.95	631,718	510,152	80.76	680,210	580,939	85.41
	Total	1,006,569	726,563	72.18	1,058,674	750538	70.89	1,200,975	960492	79.98	1,307,155	1,075,886	82.31	1,412,379	1,219,894	86.37

B: HSC and Equivalent Examinations Graduate Numbers and Pass Rates (2007-2011)

Board		2007			2008			2009			2010			2011		
		Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%
Dhaka	Male	69990	49635	70.92	80402	65963	82.04	81187	58768	72.39	102071	73478	71.99	109769	84235	76.74
	Female	57777	40787	70.59	69379	57322	82.62	71283	50292	70.55	92854	67070	72.23	98343	75792	77.07
	Total	127767	90422	70.77	149781	123285	82.31	152470	109060	71.53	194925	140548	72.10	208112	160027	76.89
Rajshahi	Male	57032	35306	61.91	72149	51645	71.58	41017	28643	69.83	44032	32672	74.20	42123	32325	76.74
	Female	45076	27887	61.87	62213	44919	72.2	33257	23696	71.25	38142	29315	76.86	35558	29054	81.71

Board		2007			2008			2009			2010			2011		
		Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%
	Total	102108	63193	61.89	134362	96564	71.87	74274	52339	70.47	82174	61987	75.43	77681	61379	79.01
Comilla	Male	25118	16918	67.35	26445	20804	78.67	21643	14882	68.76	27597	20412	73.96	31977	22437	70.17
	Female	20955	13377	63.84	23757	18015	75.83	19556	12716	65.02	26337	19032	72.26	30398	20400	67.11
	Total	46073	30295	65.75	50202	38819	77.33	41199	27598	66.99	53934	39444	73.13	62375	42837	68.68
Jessore	Male	43821	26969	61.54	38183	27648	72.41	39665	31429	79.24	42636	28879	67.73	46573	29714	63.80
	Female	34313	19509	56.86	31697	22830	72.03	33599	26284	78.23	36165	24491	67.72	39504	24836	62.87
	Total	78134	46478	59.48	69880	50478	72.24	73264	57713	78.77	78801	53370	67.73	86077	54550	63.37
Chittagong	Male	20085	12246	60.97	21697	14890	68.63	21614	16249	75.18	22382	16157	72.19	24711	17258	69.84
	Female	17007	10513	61.82	19055	12806	67.21	19884	15419	77.54	20594	15067	73.16	23056	16673	72.32
	Total	37092	22759	61.36	40752	27696	67.96	41498	31668	76.31	42976	31224	72.65	47767	33931	71.03
Barisal	Male	12620	7356	58.29	16223	10927	67.35	14854	10097	67.97	17842	13465	75.47	17968	12651	70.41
	Female	11069	5822	52.60	15573	9831	63.13	14866	9875	66.43	17299	12660	73.18	17835	12813	71.84
	Total	23689	13178	55.63	31796	20758	65.28	29720	19972	67.20	35141	26125	74.34	35803	25464	71.12
Sylhet	Male	8548	5655	66.16	9653	7115	73.71	8800	6707	76.22	9424	7391	78.43	14378	11172	77.70
	Female	8424	5543	65.80	9713	6667	68.64	9336	6706	71.83	10396	7696	74.03	16516	12209	73.92
	Total	16972	11198	65.98	19366	13782	71.17	18136	13413	73.96	19820	15087	76.12	30894	23381	75.68
Dinajpur	Male							30218	17100	56.59	36693	24736	67.41	37410	24530	65.57
	Female							28323	15622	55.16	36159	24466	67.66	36158	24155	66.80
	Total							58541	32722	55.90	72852	49202	67.54	73568	48685	66.18
Madrasah Board	Male	35201	26507	75.30	39288	32736	83.32	36322	30944	85.19	43298	37663	86.99	44485	39916	89.73
	Female	16422	11856	72.20	22436	18146	80.88	22656	18682	82.46	30492	26201	85.93	31530	28170	89.34
	Total	51623	38363	74.31	61724	50882	82.43	58978	49626	84.14	73790	63864	86.55	76015	68086	89.57
Tech. Education	Male	32972	22426	68.02	34610	27974	80.83	38185	30769	80.58	40696	33693	82.79	41251	34099	82.66

Board		2007			2008			2009			2010			2011		
		Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%	Total Student	Pass	%
Board	Female	16728	11437	68.37	19908	16332	82.04	21607	17509	81.03	22975	18825	81.94	21403	18563	86.73
	Total	49700	33863	68.13	54518	44306	81.27	59792	48278	80.74	63671	52518	82.48	62654	52662	84.05
Dhaka (DIBS*)	Male													3030	2512	82.90
	Female													852	747	87.68
	Total													3882	3259	83.95
Grand Total	Male	305387	203018	66.48	338650	259702	76.69	333505	245588	73.64	386671	288546	74.62	413675	310849	75.14
	Female	227771	146731	64.42	273731	206868	75.57	274367	196801	71.73	331413	244823	73.87	351153	263412	75.01
	Total	533158	349749	65.60	612381	466570	76.19	607872	442389	72.78	718084	533369	74.28	764828	574261	75.08

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Annex 4: Overview of funding procedures in HE in different countries throughout the World

1. For decades Bangladesh Government has been in search of an established, well-structured funding formula to support the future human resource development of the country. Ever increasing pressure of funding higher education has forced government to reconsider the current cost sharing structure. The concern of the government intensifies as the realization of the current force towards primary and secondary education strengthens the demand for places at tertiary level in coming years. This section profiles various funding methods that are followed throughout the world. The purpose of this section is to put forward a range of implementable financing options which will steer the state of total dependency on the government to a state of sharing revenue expenses of higher/tertiary education with the beneficiaries and stakeholders.

Government Funding

2. Financing higher education is a critical concept. Generally there are three entities that participate in funding higher education. These entities are (1) Government (2) Parents & Students and (3) Business Enterprises. Government's role of financing higher education is the most decisive one as the other two bodies combined provide a small percent of share. Bangladesh is experiencing a high percentage increase of government funding over the years. Universities heavily depend on government for revenue and development expenditures. Governments around the world usually use two kinds of funding. One kind is in the form of block grants and the other one is conditional grants. Disbursement of block grants, also known as unconditional grant, is mostly practiced in the countries where universities perform well in the control free environment. Although the institutions are accountable for their use of grants to the government, these institutions determine their own objective and pursue the goal according to the procedures they think is appropriate.

3. The distribution of these funds to institutions in Bangladesh is generally based on historical pattern, political deliberations and requirements of individual institutions. In a country like Bangladesh, student-based funding formula could be implemented where government will allocate fund on the basis of number of students enrolled, survival rate, costs per student, number of disadvantaged students, and demand of particular subjects.

4. In Bangladesh the financial support for higher education from the government on average is 95%. In developed countries like USA (51%), UK (53%), and Korea (57.5%), government share is very minimal compared to less-developed countries.

Systems of allocating resources to institutions of higher education could be classified in four different categories -

- Negotiated Budget
- Input-based
- Output-based
- Quality-based

5. Most of the countries' distribute public funds to higher education is based on *negotiated budget*. Brazil, Argentina, Greece, India, Nepal, Pakistan, Italy, Morocco, Philippines follow this system in funding higher education. This system is based on historical trends rather than performance based funding which ensures efficiency, quality and performance. As there are no criteria or information related to the performance of different universities is judged under this system, the budgetary allocation is most of the time inefficient.

6. OECD countries like Canada, China, France, Japan, Norway, Sweden, UK, Vietnam use performance based funding. Universities of these countries receive their budgets calculated on the basis of *input-based funding* formula which takes into account - number of students enrolled in different fields of study, levels of education (undergraduate, post-graduate, doctoral and so on), location of institution, size and mission of institutions, academic quality of education etc.

7. Denmark, Finland, Netherlands, Australia use the *output-based funding* mechanism to finance tertiary level education. Output-based funding mechanism uses the numbers of graduates as a performance criterion for funding. Under this mechanism, universities producing more graduates are eligible of getting higher funds from the government.

<i>Systems of allocating resources to institutions of higher education</i>	
Negotiated Budget	Algeria, Argentina, Brazil, Ghana, Greece, Guinea, Honduras, India, Italy, Jordan, Kenya, Morocco, Nepal, Niger, Pakistan, Peru, Philippines, Sudan, Tanzania, Venezuela, Yemen
Input-based	Canada, China, France, Hungary, Indonesia, Japan, Nigeria, Norway, South Africa, Sweden, UK, Vietnam
Output-based	Denmark, Finland, Israel, Netherlands, Australia
Quality-based	Chile

Source: *Higher Education: The Lessons of Experience*, World Bank 1994.

8. Danish taximeter model⁴⁵ is a good example of output-based funding. This model uses the *number of students passed* -as the criterion for evaluating the total funding to a particular institution. Higher Education Institution (HEI) is being paid an amount of money for each student who passes an exam. The taximeter model creates an incentive for the students to complete their study as soon as possible and move forward in the system. In this way Danish universities receive between 30 to 50 percent of their funding. The taximeter model has three components –

- The teaching taximeter, which is designated to cover direct teaching-related expenses such as salaries, teaching equipment and materials.
- The building and maintenance taximeter, which is a grant designated for capital costs, including building rental, interest and payments on mortgage debt, and expenses related to the maintenance of the buildings.
- The collective expenses taximeter, which is designed to cover types of expenses that cannot appropriately be linked to individual educational programs, such as administration and management costs, running costs and supplies.

9. Most of the HEIs in US are funded by the state. Different states of USA use performance funding based on different indicators which reflect the predilection of policy makers of those states. Among these indicators, which are considered to be a basis of evaluating the performance of the US HEIs, the followings are most commonly used.

⁴⁵ <http://www.eng.uvm.dk/Education/General/The-Taximeter-System>

Input-based funding indicators	Output-based funding indicators
<ul style="list-style-type: none"> • Tuition fees and general fees 	<ul style="list-style-type: none"> • Time-to-degree
<ul style="list-style-type: none"> • Financial aid 	<ul style="list-style-type: none"> • Student transfers
<ul style="list-style-type: none"> • Academic and administrative cost 	<ul style="list-style-type: none"> • Graduation/retention rate
<ul style="list-style-type: none"> • Research sponsored by external sources 	<ul style="list-style-type: none"> • Job Placement

Source: Burke et al. (2002c)

10. Chilean government adopted *quality-based funding* mechanism in early 80s (Ref. Olga Gladkikh, December 2009). It was aimed for allocating a significant share of government funding to HEIs on the basis of their quality. This program kept track of the top-ranked students and funded the institutions where these top-ranked students have got in. In that way only good HEIs were able to receive most of the government funds and it increased the competition among the HEIs for top students.

11. The government of UK uses two separate sets of indicators to allocate funds for higher education. They use a set of indicators to evaluate the allocation needed for education and they use a completely different set of indicators to finance research in the HEIs. Indicators used for both teaching and research grant are:

Teaching grant indicators

- Number of students
- Length of courses
- Size of the institution
- Location
- Level of specialization
- Number of disadvantaged students

Research grant indicators

- Number of qualified researchers
- Published research documents
- Number of research students
- External research income

Source: HEFCE 2003

12. The US state of Tennessee uses multiple performance criteria to assess funding for higher education. Both institutional and government officials take part in funding procedure and it gives them a sense of responsibility as they are part of the system. Four standards and ten indicators with certain given weights are set to evaluate funding. Decision of funding by applying the formula takes into account the types of HEIs and duration of the degrees. The state government revises the formula every five years, which gives them and the HEIs a chance to reconfigure any policies and indicators.

Performance indicators used in the Tennessee funding formula

Indicator	2-year campuses	4-year campuses
Standard 1 - Academic Testing and Program Review		
• Foundation Testing of General Education Outcomes	15	15
• Pilot Evaluations of Other General Education Outcome Measures	5	5
• Program Accountability		
1. Program Review	5	10
2. Program Accreditation	10	15
3. Major Reid Testing	15	15

Indicator	2-year campuses	4-year campuses
Standard 2 - Satisfaction Studies <ul style="list-style-type: none"> • <i>Student/Alumni/Employer Surveys</i> • <i>Transfer and Articulation</i> 	10 N/A	10 5
Standard 3 - Planning and Collaboration <ul style="list-style-type: none"> • <i>Mission Distinctive Institutional Goals</i> • <i>State Strategic Plan Goals</i> 	5 5	5 5
Standard 4 - Student Outcomes and Implementation <ul style="list-style-type: none"> • <i>Output Attainment</i> <ol style="list-style-type: none"> 1. Retention/Persistence 2. Job Placement 3. Assessment Implementation 	5 15 10	5 15 10
Total Points	100	100

Source: Bogue (2002)

Tuition Fees

13. Students in public HEIs of Bangladesh enjoy the privilege of paying very small amount of money for a relatively good quality education. If we don't consider Scandinavian countries like Finland or Denmark, which are considered as developed countries with very little population and high income providing cost free education, Bangladesh could easily be distinguished as a country providing cheapest education where students of public HEIs pay as much as 20 Tk. (25 cents) per month as tuition fees. While students in private HEIs pay around Tk.5,000 to10,000 (USD 60-120) per month as tuition fees and other charges. Besides, there is no tuition fee for talented students and they receive scholarships in HEIs in Bangladesh.

14. Most of the developing countries realize the importance of cost sharing. In Vietnam, income generated from tuition fees in public HEIs is 22% of recurrent expenditure. In Chile, Jordan and Korea it is 36%, 40%, and 46% respectively. To keep up with the pace of higher wage and other increase of cost, Singapore increases its student tuition fees 5-7% per year. They implemented a system where self-supported students pay tuition fees ten times higher than regular students. In Hungary, students who get high marks do not need to pay tuition fees. On the contrary, some developing and developed countries show a bleak picture in generating sufficient fund from tuition fees (e.g. Bolivia, France, Romania, Japan, Hungary etc.). All of the above mentioned countries income from tuition fees in public HEIs is less than 10% of recurrent expenditure.

Loan Schemes

15. Many of both developing and developed countries have introduced different loan schemes as an alternative source of funding higher education. Although these loan schemes haven't been successful in most of the less-developed countries, these sure did well in case of developed countries like USA or UK. The reason behind this is meticulous, well planned and suitable for student loan structure. In developed countries, commercial banks usually take responsibility of disbursement and recovery of loan. Tight monitoring makes their job easy. But less developed countries, where the people are unable to meet the demand for collateral, cannot practice the exercise of loan schemes. Many find, poor administrative infrastructure, high interest rates, high default rates and feeble monitoring - as the rational explanation for these less developed or developing countries not being able to implement any loan scheme properly. That

is the reason why in developing countries most of the loan schemes are government funded. Furthermore low level of recovery is another big concern for the government of these countries. A frail tax collection system inhibits the idea of implementing a structured loan scheme for the students.

16. Among the successful countries, which are being able to realize well-structured loan schemes are Colombia, Thailand and South Africa. Meanwhile, Australia's funding formula is exceptional in a sense that they use a system of loans and recovery through the taxation mechanism. Students requiring loan gets it and they are obligated to repay the loan once they have graduated and are a member of the active work force. These repayments are collected through the tax system.

17. South Africa's loan scheme is government-funded. Their loan scheme has been designed to target only the needy students. A means test determines the financial need of a student and an independent body appointed by government designs the test. The independent body does this work on behalf of the government HEIs are responsible for their action to this independent body and they are mandated to administer the means test, conclude loan agreement and report the progress of the student to the independent body. The good side of this loan structure is that both government and the beneficiaries are destined to share the burden on the demand basis. In this scheme a student from a mediocre family will get a high amount of loan than a student from high-income family. This loan scheme distinguishes itself from other practiced loan schemes around the world by bringing in performance as a major component. Loans are converted to grants for successful students and no loan is offered to students repeating same courses. Moreover, loans are provided on the basis of the need of the society. For example - students of Science and Engineering faculty get more loans than the students of humanities or social science. Like Australia, students are obligated to repay the loan once they have graduated and are member of the active work force with a certain threshold income. South African loan scheme has been successful due to the factors like - high recovery rate, low administrative cost, concrete tax administration system and low levels of graduate unemployment.

18. Colombia and Canadian province of Quebec experienced a high percentage of loan recovery due to their well-designed and administered financially sustainable programs. They were successful because of their effectiveness of loan collection agency, whose primary objective was to reduce default rates. For example - A student loan program named 'The Colombian Institute of Educational Credit and Training Abroad' (ICETEX) in Colombia has been issuing loan to poor students since 1952. It has been an extremely successful loan scheme so far. Its decentralized structure made this scheme so popular and successful, Twenty-one regional offices were set, each managing its own portfolio. Each offices were in charge of appointing its own staff, allocating its budget and developing a regional student loan trust fund. The program was highly successful in expanding equity & access and maintaining efficiency. Academic merit and financial need were the basis of this loan scheme. About 400,000 students were benefited in the span of forty years since its instigation with a loan arrear of only about 12 percent.

19. In United Kingdom the loan recovery ratio was about 59 percent including default and administrative cost. This surely doesn't give an optimistic idea of loan schemes in that country. Even though this recovery ratio is not that high, positive interest rate gave these schemes a financially sustainable stature.

20. Countries like Sweden, Ghana and Australia are practicing more equitable income-contingent loan program. Ability-to-pay principle is the key factor of this kind of loan. This loan scheme minimizes the risk of student default by limiting repayments within the range of 2-4 percent of income after graduation, depending on how much a graduate earns. Administration is much cheaper in such schemes because loan recovery is handled through existing tax collection mechanism of the country. Australia has been greatly benefited through the introduction of this loan scheme, as they were able to introduce cost sharing in higher education and achieve a 30 percent expansion in enrollments in 5 years of time span without increasing any noteworthy public funding.

21. Thailand is on the verge of launching a financial system called TICAL (Thailand's Income Contingent and Allowance Loan) in 2006. This loan scheme was formed to eradicate the following problems:

- 1) Public subsidies to HEI students is too high in Thailand:
 - A student of a public HEI in Thailand pays about 20% of total costs of operation of the HEI on average.
 - Poor students pay relatively higher amount in private HEIs than the students who are rich.
 - Students are mostly from middle-income and high-income families.
- 2) Difficulty in increasing tuition fees:
 - Current tuition fee is very low and any decision to increase tuition fees can result in protest.
 - Students cannot afford to pay for technical subjects like medicine, or engineering as this costs lot higher than other general subjects.
- 3) Normal student loans are too strict: Contemporary loan schemes face the problems of -
 - Failure of loan repayment.
 - Value the usefulness of individual courses.

22. In this new scheme, students will be bearing 50% of the total cost. This scheme gained unparalleled popularity because of its positive features.

- Zero interest rate
- No time limit for debt repayment
- Long repayment rate of 1 % per month
- No repayment when earning is disrupted
- Provision of threshold income: Repayment of loan is applicable if only the income of the person is 250 dollar per month.

Graduate Taxes

23. The simple concept following this form of tax is to charge a graduate higher tax than a non-graduate. The assumption behind implementing this tax is to get back some of the costs incurred by the government in higher education in the form of tax. In this scheme beneficiaries of tertiary level education are required to pay tax premium one or few points above prevailing average tax rate. There is no record of any country practicing this mechanism so far as this idea of graduate tax is laden with quite a few problems. To name a few –

- What will be the tax rate charged to the graduates?
- What should be the length of repayment?
- Should he/she be charged for rest of his/her life after graduation?
- Is it going to help the society?
- Is tax collecting agency capable enough to keep track of all the graduates and retrieve loan from these graduates?
- If implemented, would it be able to retrieve the expenses made by the government for the students previously?

Vouchers

24. This is a new addition to the various forms of funding higher education. Vouchers are well known as a very powerful means of demand-side financing. A voucher symbolizes a sum of money given to a household or student to attend an institution of his choice. It is different from the conventional funding in a way that it is a direct payment to the household or student rather than any payment to institution. The idea behind this system is to trigger competition amongst institutions to attract students which in turn

would lead to efficiency. To secure their funding, higher education institutions shift their focus from satisfying government officials towards the needs of their students. This way a voucher scheme contains incentives to strengthen student choice and the higher education institutions are forced to respond to the preferences of their students constituting a market-oriented type of funding of higher education. United Kingdom is practicing this mechanism with success. Colombia introduced voucher for the poor. Many other countries, like Finland, Netherlands have discussed about the possibility of implementation of voucher system. The implementation, however, was not possible in most of the countries. Finland performed a detailed investigation on various voucher models but could not execute these.

Alternative Funding Sources

25. Government can instruct institutions to try out other means of funding and generate revenue to cover their own expenditures. Institutions will be enriched if they could attract grant/scholarship, donation, and endowment from philanthropists, alumni and business houses. These contributions can come in the form of:

- Fund for the construction of new building/facility
- Fund for the purchase of scientific equipment
- Fund for poor students
- Donation of Books and Art

26. Pakistan has been able to establish a linkage between HEIs and business houses, banks & industries. These business houses send their executives for training in HEIs and HEIs generate sufficient fund through the training. There also remains the added benefit of internship for the graduates or an assurance of job in those firms. In addition, the HEIs in Pakistan raise 25% of fund for higher education just by arranging joint scientific experiment with the industries.

27. In countries like Chile, Indonesia, Thailand and Venezuela, private business firms provide different kinds of scholarships and subsidized loans for talented students. These countries have tax regimes, which encourage such donations. Private companies in Chile get a tax exemption on 50 percent of their donations to HEIs. In India, private companies and philanthropists get a tax exemption on 150 percent of their donations to HEIs. This type of tax incentives, although can prompt a significant increase in donations, remains a modest source of generating revenue for the HEIs in those countries (0.6% of total HEI expenditures).

28. Many African HEIs realized the importance of the usefulness of collaboration with private businesses and there exists various HEI-industry cooperative schemes. These HEIs keenly engage private sectors to unearth the gaps in areas of expertise and research.

Another way of raising sufficient revenue is by charging the teachers of public HEIs for their consultancy and research project outside the HEI arena. U.S. HEIs generate 60% of their income by charging the teachers for their consultancy.

29. HEIs can generate revenue by offering short courses, seminar, conferences and summer programs. This is another very effective source of revenue. It also helps the individuals to develop market-relevant skills that could come handy and more purposeful in real life. HEIs and Colleges in Vietnam now receive about 8 percent of their revenue from introducing English language programs and night courses in computers & information technology.

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