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IDA/R2009-0026/1

February 26, 2009

**Streamlined Procedure
For meeting of
Board: Tuesday, March 17, 2009**

FROM: Vice President and Corporate Secretary

Bangladesh - Higher Education Quality Enhancement Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed credit to the People's Republic of Bangladesh for a Higher Education Quality Enhancement Project (IDA/R2009-0026). This project will be taken up at a meeting of the Executive Directors on **Tuesday, March 17, 2009 under the streamlined procedure.**

Distribution:

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Report No: 44827-BD

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED CREDIT
IN THE AMOUNT OF SDR 54.4 MILLION
(US\$81 MILLION EQUIVALENT)
TO THE
PEOPLE'S REPUBLIC OF BANGLADESH
FOR A
HIGHER EDUCATION QUALITY ENHANCEMENT PROJECT
February 20, 2009

**Human Development Sector
South Asia Region**

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CURRENCY EQUIVALENTS

(Exchange Rate Effective August 31, 2008)

Currency Unit	=	Taka
Taka 1	=	US\$0.0144
US\$1.00	=	Taka 69.50

FISCAL YEAR

July 1 - June 30

ABBREVIATIONS AND ACRONYMS

AIF	Academic Innovation Fund
ARP	Area Review Panel
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
BCN	Basic Campus Network
BdREN	Bangladesh Research and Education Network
BEC	Bid Evaluation Committee
B.Ed	Bachelor of Education
BIPC	Bangladesh INASP-PERI Consortium
CAS	Country Assistance Strategy
CPTU	Central Procurement Technical Unit
CTG	Care Taker Government
DG	Director General
DP	Development Partners
DPC	Development Policy Credit
DPD	Director of Planning and Development
DPP	Development Project Proposal
DSC	Development Support Credit
EMF	Environmental Management Framework
EMP	Environmental Management Plan
ERD	Economic Relation Division
FM	Financial Management
FMQ	Financial Management Questionnaire
FMS	Financial Management System
FY	Fiscal Year
GoB	Government of Bangladesh
HEI	Higher Education Institution
HEMIS	Higher Education Management Information System
HEQEP	Higher Education Quality Enhancement Project
HEQEPU	Higher Education Quality Enhancement Project Unit
HSC	Higher Secondary Certificate
ICT	Information & Communication Technologies
IDA	International Development Association
IUFRs	Interim Unaudited Financial Reports

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KPI	Key Performance Indicator
LAN	Local Area Network
M&E	Monitoring and Evaluation
MEU	Monitoring and Evaluation Unit
MoE	Ministry of Education
MoF	Ministry of Finance
MTBF	Medium-Term Budgetary Framework
MTR	Mid-Term Review
NCTB	National Curriculum and Textbook Board
N- HEMIS	National Higher Education Management Information System
NOC	Network Operating Center
OM	Operation Manual
PAD	Project Appraisal Document
PC	Procurement Consultant
PCT	Procurement Core Team
PEC	Proposal Evaluation Committee
PFM	Public Financial Management
PFP	Procurement Focal Point
PIM	Project Implementation Manual
POP	Point of Presence
PPA	Public Procurement Act
PPT	Project Preparation Team
PRMP	Procurement Risk Mitigation Plan
PRSP	Poverty Reduction Strategy Paper
REN	Research and Education Network
SA	Self-Assessment
SSC	Secondary School Certificate
TST	Technical Supervisory Team
UAIFS	University AIF Secretariat
UGC	University Grants Commission
UGCAIFS	University Grants Commission AIF Secretariat
UGCBAIF	University Grants Commission Board for Academic Innovation Fund
U- HEMIS	University Higher Education Management Information System
UPSC	University Project Screening Committee

Vice President:	Isabel M. Guerrero
Country Director:	Xian Zhu
Sector Director:	Michal Rutkowski
Sector Manager:	Amit Dar
Task Team Leaders:	Benoît Millot and Subrata S. Dhar

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BANGLADESH
Higher Education Quality Enhancement Project

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BANGLADESH
HIGHER EDUCATION QUALITY ENHANCEMENT PROJECT
PROJECT APPRAISAL DOCUMENT
SOUTH ASIA
SASHD

Date: February 20, 2009	Team Leaders: Benoît Millot/Subrata S. Dhar
Country Director: Xian Zhu	Sectors: Tertiary education (100%)
Sector Manager/Director: Amit Dar/Michal Rutkowski	Theme: Education for Knowledge Economy
Project ID: P106216	Environmental screening category: B
Lending Instrument: Specific Investment Loan	

Project Financing Data			
[] Loan [X] Credit [] Grant [] Guarantee [] Other:			
For Loans/Credits/Others: Total Bank financing (US\$m.): 81 Proposed terms: Standard IDA terms, with 40 years' maturity, including 10 years' grace period			
Financing Plan (US\$m)			
Source	Local	Foreign	Total
BORROWER/RECIPIENT	10.8		10.8
International Development Association (IDA)	55.8	25.2	81.0
Total:	66.6	25.2	91.8
Recipient: Economic Relations Division Ministry of Finance Bangladesh			
Responsible Agency: Government of Bangladesh, University Grants Commission (UGC), Agargaon, Dhaka 1207, Bangladesh Tel: 880 811 2629 - Fax: 880 281 22948 - Email: chairmanugc@yahoo.com			

Estimated disbursements (Bank FY/US\$m)									
FY	2009	2010	2011	2012	2013	2014			
Annual	0.2	6	25	28	13.8	8			
Cumulative	0.2	6.2	31.2	59.2	73	81			
Project implementation period: Start April 15, 2009 End: June 30, 2013 Expected effectiveness date: April 15, 2009 Expected closing date: December 31, 2013									

Does the project depart from the CAS in content or other significant respects? Ref. PAD I.C	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the project require any exceptions from Bank policies? Ref. PAD IV.G	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Have these been approved by Bank management?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is approval for any policy exception sought from the Board?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the project include any critical risks rated "substantial" or "high"? Ref. PAD III.E	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the project meet the Regional criteria for readiness for implementation? Ref. PAD IV.G	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Project development objective Ref. PAD II.B, Technical Annex 3	
The main objective of the project is to improve the quality and relevance of the teaching and research environment in higher education institutions through encouraging both innovation and accountability within universities and by enhancing the technical and institutional capacity of the higher education sector.	
Project description [one-sentence summary of each component] Ref. PAD II.C, Technical Annex 4	
The Higher Education Quality Enhancement Project (HEQEP) will comprise four components: (i) promotion of academic innovation in teaching, learning and research through an Academic Innovation Fund (AIF) allocating funds to universities on a competitive basis; (ii) institutional capacity building at the University Grants Commission (UGC) and the universities; (iii) connectivity capacity building for universities and research centers through the development of the Bangladesh Research and Education Network (BdREN); and (iv) support to the operation of the project implementation unit.	
Which safeguard policies are triggered, if any? Ref. PAD IV.F, Technical Annex 10	
Environmental Assessment (OP/BP 4.01). The activities proposed under the project do not pose significant environmental risks. They are mainly technical assistance and no major infrastructural activities are proposed. It will not require any acquisition of land, construction of any new building or major physical expansion. The proposed project may finance, among other things, small infrastructure renovation/refurbishing construction. These small scale construction activities are not anticipated to cause any major environmental impacts considering that all will be done with the existing structures in order to provide better facilities. Environmental mitigation measures and screening mechanism proposed under the project would help minimize adverse impacts on environment.	
Significant, non-standard conditions, if any, for: Nil Board presentation: Nil Loan/credit effectiveness: Nil Covenants applicable to project implementation:	
<u><i>Project Management and Institutional Arrangement</i></u>	
A. The Government shall carry out the Project in accordance with the Project Implementation Manual, and except as the Association shall otherwise agree, the Government shall not amend or waive	

any provision thereof if, in the opinion of the Association, such amendment or waiver may materially and adversely affect the implementation of the Project.

B. The Government shall maintain, until the completion of the Project, an Inter-Ministerial Project Steering Committee, to be chaired by the Secretary of MOE, and including representatives from different agencies involved in the implementation of the Project, to provide policy directions, oversee overall Project implementation, and carry out annual reviews.

C. The Government shall maintain, until the completion of the Project, a Project Implementation Committee, to be led by the UGC Chairman, and including representatives of MOE, eligible beneficiaries, and HEIs, to provide guidance to those involved in the implementation of different activities under the Project and to facilitate the resolution of implementation issues, if any.

D. The Government shall maintain until the completion of the Project, within UGC:

- (a) an adequately staffed Project Implementation Unit headed by a full time Project Director, who shall be accountable to the Chairman of UGC and be responsible for:
 - (i) planning, coordination, implementation and monitoring of Project activities; (ii) carrying out of procurement and financial management for the Project; and (iii) reporting on progress of the Project;
- (b) a UGC Academic Innovation Fund Secretariat (UGCAIFS), headed by a Coordinator, to be responsible for coordinating the implementation of Sub-Projects, and training programs and mobilization in connection with such Sub-Projects; and
- (c) a UGC Board for AIF responsible for overseeing the Sub-Project activities and making final decisions on AIF allocations.

E. The Government shall cause UGC to create by June 30, 2009, three new units as a part of UGC's regular organizational structure, with terms of reference satisfactory to the Association, including: (i) a Strategy and Policy Unit, responsible for carrying out strategic planning for the higher education sector; (ii) a Higher Education Management Information System Unit to help monitoring the performance of the higher education sector at large; and (iii) an Information and Communication Technologies Unit to oversee issues related to information, communication, implementation of BdREN and digital library under Component 3 of the Project.

F. The Government shall cause UGC to prepare and circulate, no later than 30 days after the Effective Date, a guidance note outlining the financial management functions and staff responsibilities within HEQEP Unit, the UGCAIFS, and within the entities specifically carrying out the Sub-Projects.

Accounts/Audit

G. The Government shall: (i) furnish to IDA quarterly interim unaudited financial reports for the Project within 45 days from the end of each calendar quarter in form and substance satisfactory to IDA; and (ii) furnish to IDA audit reports conducted by independent auditors within six months from the end of each fiscal year.

H. The Government shall establish, by no later than June 30, 2009, an audit committee, whose composition and terms of reference shall be satisfactory to the Association.

Implementation

I. The Government, through UGC, shall: (i) make each grant available to an eligible beneficiary under a Performance Contract on terms and conditions approved by the Association; the contract will be signed by UGC, participating institution and the entity in-charge of carrying out the proposed Sub-Project; and (ii) cause every Higher Education Institution (HEI) receiving funds under AIF to establish and maintain until completion of all sub-projects, an AIF Secretariat or its equivalent, with Terms of Reference acceptable to IDA.

J. The Government shall cause UGC to enter into service agreements with participating HEIs, in form and substance and terms and conditions agreed with the Association, to ensure adequate provisioning of BdREN services to HEIs.

K. The Government shall cause UGC to initiate, by no later than December 31, 2010 and complete, by no later than December 31, 2012, all necessary legal, administrative, and institutional measures to constitute a trust that will manage and operate BdREN.

Monitoring and Evaluation, Research and Reporting

L. The Government shall: (i) monitor and evaluate the progress of the Project and prepare Project reports on the basis of the indicators agreed with IDA. Each report shall cover the period of one calendar semester, and shall be furnished to IDA within 45 days after the end of each period; and (ii) carry out a joint Mid-Term Review with IDA, by July 2011, or at a later date if requested by IDA.

Environment and Social Covenants

M. The Government shall comply with the agreed Environment and Social safeguards.

Private Universities

N. In the case of a private university, such private university, to be eligible for AIF, will provide matching funds of twenty percent of the Sub-project cost.

Disbursement Conditions

O. No withdrawal will be made for: (i) payments for grants under Category 1, unless the expenditures are eligible and have been made in conformity with the criteria described in the PIM; and (ii) payments for training costs under Disbursement Category 4, unless the training course is included in the training plan and the list of participants have been cleared by IDA.

I. STRATEGIC CONTEXT AND RATIONALE

A. Country and Sector Issues¹

1. Bangladesh, with 145 million people and a per capita GNI of US\$599 (provisional in 2007-08), has recorded impressive progress in poverty reduction and a number of human development outcomes. Per capita GDP growth has been above 5 percent since early 2000s, while headcount poverty has declined from 59 percent in 1991 to 40 percent in 2005. Gross primary school enrolment rate is around 90 percent, secondary school enrolment has more than doubled since independence, and the gender parity target of the Millennium Development Goals (MDGs) has already been achieved both at primary² and secondary education levels. These are all remarkable feats when compared to countries at similar level of income in, or outside the region. At the secondary level, the Ministry of Education (MoE) oversees a unique system of public-private partnership. More than 98 percent of the secondary schools are managed and operated by the private sector with financial support from the government. Furthermore, the Government of Bangladesh (GoB) with support from a series of Programmatic Education Sector Development Support Credits from the World Bank has launched a comprehensive policy reform agenda to ensure systemic improvement in governance, quality and relevance of secondary education.

2. However, the higher education scenario is different. The MoE has the overall responsibility for policy formulation, strategic leadership and preparation of budget for public funding in higher education. In 1973, it commissioned the University Grants Commission (UGC), the oversight apex body for all universities, as the intermediary between the Government and the universities to regulate the university affairs. Now 81 universities –30 of them public and 51 private -- provide four types of higher education in the country: (i) general education; (ii) science, technology and engineering education; (iii) agricultural education; and (iv) medical education. Together, public and private universities cater for about 17 percent of total enrollments in higher education (about 1,500 affiliated colleges enroll 75 percent and the Open University another 8 percent).

3. The tertiary education sub-sector currently faces many deeply rooted and intertwined challenges. These include: low quality of education; limited access to tertiary level institutions; low level of research; weak governance and management practices; weak sector planning and monitoring capacity; inadequate funding level and mechanisms and in some cases, politicization. In view of these challenges, the Government prepared a Higher Education Strategic Plan 2006-26 which was fully home-grown with participation of front-line academics from both public and private universities and representatives from think-tanks and the private sector. This Plan, widely recognized as a ground-breaking initiative signaling a strong commitment by the government to enhance investments in higher education, comprehensively identifies issues and challenges and recommends solutions to the problems to be tackled over a period of 20 years.

4. *Quality and Relevance* – There are growing worries over the quality of provision in the private and public sectors, particularly in some of the newer private universities and in the vast number of colleges under the wing of the National University. Most of the universities do not have access to the latest books, journals and research articles. The poor quality of English language and IT skills of many staff and students leads to their being cut off from much of the literature and electronic resources in their disciplines. Skill development opportunities for teaching staff are scarce. Weak Internet connections limit communications and exchanges both within and amongst academic communities. Enhancement of

¹ Several sources are used for this section. (a) Bangladesh Economic Review 2008. Economic Advisor's Wing, Finance Division, Ministry of Finance; (b) HIES (2005); (c) Education for All In Bangladesh, The World Bank (2008); and (d) 33rd Yearly Report, Bangladesh University Grants Commission.

² In Bangladesh Primary level consists of Grades 1-5, while secondary level consists of Grades 6-10.

quality and relevance of higher education, both in public and private institutions, is now at the top of the agenda in the government's concerns and initiatives in higher education.

5. Currently, there is no tertiary level quality assurance system. Neither are there any known internal quality assurance cells within public universities. The Strategic Plan for Higher Education has proposed the establishment of an independent Accreditation Council catering for both public and private universities, but implementation of an Accreditation Council has proved to be difficult so far.

6. Access – Less than about six percent of the eligible age cohort are enrolled in universities, degree colleges, or other forms of tertiary education. This gross tertiary enrollment rate is one of the lowest in the world. However, this situation is changing with the rapid growth of the private universities. Some 34 private universities were established in the last seven years. Private universities now cater for 64 percent of the university students while it was only 30 percent in 2003.

7. Research – Bangladesh does not have a national strategy for research and the role of universities in undertaking research is affected by many constraints. An effective mechanism to link programs between universities (and research institutes) and industry and business, whether at home or abroad, is still to be established. Finally, there is a lack of an appropriate funding mechanism on a suitable scale to encourage basic and applied research in the universities and in different research organizations.

8. Governance and Management - Governance arrangements in some public universities and many higher education colleges contribute to politicization of academic decision making. The university acts in the past were meant to promote academic independence. However, the positive political role of the universities in shaping the history of the country has now allegedly been somewhat derailed. While correcting governance malpractices is of utmost importance, making sure that any measure taken does not act/ is not seen as a ploy to curb academic freedom is equally critical. So far, despite public debates about these ills, the GoB could not come up with any effective strategy to minimize them significantly dispelling the apprehension of the academic community about any “undue intervention” on its academic autonomy.

9. Strategic Capacity – UGC is not adequately staffed to effectively play its strategic role. Planning, Monitoring and Evaluation are conducted in an *ad hoc* manner, with incomplete and untimely information to base decision making. A system is not in place to collect data and to carry out studies on university graduates, labor market outcomes and the emerging challenges in the tertiary education sector. The universities also lack the staff and the capacity to lay out their own strategy.

10. Financing - In 2007/2008, Bangladesh apportioned about 2.1 percent of its GDP to education, and about 0.12 percent to tertiary education – a very low share by all standards. The low levels of government funding and the very high percentage of that funding allocated to salaries, leave inadequate funding for equipment, computers, books and journals, building maintenance and quality enhancing measures. Besides, these scarce resources are also not utilized efficiently. Budget allocations to institutions are based on precedent or influence and not based on a strict formula applying across universities and linking funding with outputs. University authorities have little flexibility in spending their budgets. Under severe budget constraints, activities of the departments and institutions are limited to the bare minimum. The inevitable casualty is quality enhancement.

11. Despite their potential as a major source of funding for universities and as a way to diversify revenues, tuition fees in most of the public universities are close to nil, especially in general public universities. Due to fierce students' resistance, the fee levels have not been changed much for the last several decades, despite considerable increases in higher education expenses.

B. Rationale for Bank Involvement

12. To build upon the successes of the past decades in primary and secondary education, and to start addressing the many weaknesses plaguing higher education identified in its Higher Education Strategic Plan, the Government has requested the Bank to support its higher education agenda.

13. There are compelling reasons for the Bank to be involved in Higher Education in Bangladesh. First, higher education is a necessary ingredient of the strategy to energize the economic environment and to boost the investment climate, and this strategy constitutes the first pillar of the Bank's FY2006-2009 Country Assistance Strategy (CAS)³. Second, the Bank's persistent support to primary and secondary education needs to be complemented by a parallel support to higher education. Third, mostly because of the still substantial support needed at these lower levels, few other development partners have an interest and/or the capacity to intervene in the complex higher education sector, leaving the Bank – equipped with a vast and in-depth experience in this field - filling an increasingly vertiginous gap. Fourth, the determination of the Government to support the implementation of the Strategic Plan and its commitment to accelerate reforms in the higher education sector further justifies an operation to support this sector.

14. As evidenced by the sectoral issues listed above, the agenda is vast. The extreme political sensitivity of the sector makes the issues particularly severe, and makes the measures to tackle them especially delicate. In addition, the country is currently in a state of political transition with considerable uncertainty regarding when and how this transition will end.

15. For these reasons, it is deemed that a prudent, selective, and progressive approach is the best guarantee of success. Following this approach, the proposed Project is viewed as a first operation of a long-term, phased program of support (both analytical and lending). The proposed operation will focus on activities which can bring rapid and visible benefits to the academic community – and which will establish the basis for a credible partnership. It will mostly target the upper tier of the higher education sector, namely the universities, with the understanding that a specific operation should be dedicated in the future to the affiliated colleges where the majority of post-secondary graduates are enrolled.

16. The proposed operation will select initiatives with the potential to revamp universities' quality, relevance, governance and management, acceptable to the academic community. It is deliberately a low reform intensive project avoiding controversial measures. Once sufficient progress is demonstrated under this operation, it is anticipated that there will be opportunities and consensus for deepening much needed reforms in tertiary education. It will be the first building block of a long-term support and will pave the way for more systemic changes of a wider coverage when circumstances allow. By building up the strategic planning capacity of UGC, the proposed project will allow the development of sound, and analytically grounded reforms in the future.

C. Higher level objectives to which the Project contributes

17. The proposed Project will contribute to Bangladesh's long-term objective of developing the human capital of the country for sustaining economic growth and poverty reduction. The objectives of the Project are well aligned with the recent Poverty Reduction Strategy Paper (PRSP)⁴ and with the CAS. The PRSP lays out the education sector strategy for Bangladesh - focusing on enhancing the quality of education, ensuring equitable access and better utilization of scarce resources. The CAS is constructed on

³ *Country Assistance Strategy for the People's Republic of Bangladesh – FY06-09*, Report No. 35193, The World Bank, 2006.

⁴ *Unlocking the Potential: National Strategy for Accelerated Poverty Reduction*, Government of People's Republic of Bangladesh, 2005.

two complementary pillars: (i) improving the investment climate; and (ii) empowering the poor. Higher education is contributing directly to the first pillar and indirectly to the second one. The CAS also proposes to assist in these areas by strengthening accountability – as part of the governance agenda, its cross-cutting theme. Improving the quality of education at the tertiary level – as intended with the proposed project--can play an important role in effectively operationalizing GoB's strategy in the education sector.

II. PROJECT DESCRIPTION

A. Lending instrument

18. The proposed Bank instrument to finance the proposed Higher Education Quality Enhancement Project (HEQEP) is a Sector Investment Loan (SIL) using an IDA credit. GoB is committed to enhancing the quality of teaching, learning and research in tertiary education. The HEQEP will be the first full-fledged operation for the World Bank in the higher education sector of Bangladesh⁵.

B. Project development objective and key indicators

19. The key project development objective is to improve the quality and relevance of the teaching and research environment in higher education institutions through encouraging both innovation and accountability within universities and by enhancing the technical and institutional capacity of the higher education sector.

20. The full impact of the project will take time to materialize, and will spill over long time after the project completion. Hence, Key Performance Indicators (KPIs) are a combination of outcome and output indicators, allowing an assessment of how the project has progressed, but they cannot provide a final assessment of the impact of the project, as most of this impact is demonstrative and of a long-term nature, and will reveal itself only after project completion. The proposed KPIs are as follows:

Outcome Indicators:

- Increased level of satisfaction of students and faculty staff regarding the quality of teaching and research environment, and of employers regarding the relevance of teaching and research programs;
- Institutionalization of a competitive funding mechanism for teaching and research through increased allocation in the Medium-Term Budgetary Framework (MTBF); and
- Proportion of students and faculty staff with access to advanced internet connectivity.

Intermediate Outcome Indicators:

- Proportion of sub-projects implemented according to the plan;
- Higher Education Management Information System in place and operational;
- BdREN created; and
- Digital library created.

⁵ The Bank has approved a US\$13 million credit in support of universities in 1966, and a US\$19.8 million credit to support university development in 1983. This, however, was the last operation in the sector until today.

C. Project components

21. The proposed project will consist of four components: (i) Promoting Academic Innovation; (ii) Building Institutional Capacity; (iii) Raising the Connectivity Capacity of the Sector; and (iv) Project Management. The first component reflects a demand-side approach. It is complemented by a second and a third component both of which build on supply-side interventions. The fourth component encompasses the implementation of all activities under the other three components.

Component 1 – Promoting Academic Innovation (Total: US\$50.2 million; IDA: US\$48.1 million)

22. The objectives of this component are to: (i) establish enabling conditions to enhance the quality and relevance of teaching, learning and research in universities; and (ii) introduce an efficient instrument for the allocation of additional public funds to universities with an emphasis on innovation and accountability. This component aims at instilling changes within the academic community in order to invigorate teaching, improve learning, and boost research, in areas of priorities for national development, relying on demand from this community. It also aspires to rationalize resource allocation by setting up a mechanism based on performance rather than inputs. The approach is to reward academic units that demonstrate vision, innovation and discipline, instead of imposing rules in a top-down mode. Additional objectives of this component are to infuse universities with project management, procurement, and financial management capacity, and to identify and nurture leaders within the higher education sector.

23. In order to reach these objectives, an Academic Innovation Fund (AIF) will be set up. The AIF will be used to improve the quality of academic activities and outcomes, to promote and implement departmental or programmatic self-assessment exercises, as well as to strengthen universities' linkages with national development efforts. It will be also used to encourage cross-disciplinary or inter-institutional academic collaboration, to focus institutional attention to new or emerging issues of policy importance, and to promote the use of modern communication technologies.

24. AIF resources will be made available as a grant for all eligible public and private universities on a competitive basis. The recent rapid growth of the private universities makes it imperative to involve them in the AIF scheme. While the GoB is reviewing the regulatory framework for private universities, it is also convinced that any intervention to improve quality and relevance of university education should not leave out almost two thirds of the university students. Besides, their inclusion in the AIF scheme will create a level playing field. However, the affiliated colleges of the National University and the Open University will not be included in the AIF as they constitute a separate category demanding exclusive attention, possibly in a future, separate intervention.

25. Participation of universities in this project will be totally voluntary. Principles of the AIF are strict impartiality and transparency with clearly identified selection criteria and procedures and public disclosure of the decisions. These key features are built in the AIF design in order to yield expected results. Once sub-projects are selected, they will be implemented with the support of AIF resources, which will be utilized according to a plan which includes clearly defined measurable performance indicators.

26. The AIF will allocate its resources through three competitive windows: (i) improvement of teaching and learning, (ii) enhancement of research capabilities, and (iii) university-wide innovations⁶. To this purpose, universities will be invited to submit proposals in two rounds, the first starting after credit effectiveness; the second, after the second year of implementation.

⁶ See Annex 4 for a detailed breakdown of AIF resources by windows, disciplines, and rounds. It is expected that a total of about 200 sub-projects will be approved, with a notional average of about US\$250,000 per sub-project.

27. Each of the first two windows will comprise two clusters of academic disciplines (Humanities and Social Sciences / Sciences and Technologies), each of them with specific, predetermined resource allocations, minimum and maximum limits for any given sub-project, and a notional grant size. The teaching and learning window will also be accessible for self-assessments, to help the universities and their departments to identify their strengths and weaknesses and to promote a culture of quality enhancement.

28. The third window will cover activities initiated at the university level, in particular investments to ramp up university computerization and campus communication infrastructure, allowing the full use of the advanced connectivity which the Bangladesh National Research and Education Network will supply (Component 3). It will also cover investments in scientific equipment needed at university level and in library improvements. Finally, it will also reward initiatives aiming to set up partnerships amongst departments and/or universities.

29. Departments of the universities, institutes, affiliated centers, universities themselves, and any of their combination will be eligible to compete for the funds, subject to compliance with clear and objective criteria (Annex 4). Independent Area Review Panels (ARP) will evaluate the proposals based on well-defined criteria. Based on their recommendations, the University Grants Commission Board for AIF (UGCBAIF) will make the final decision. In order to ensure level playing field in competition, all universities are categorized into three clusters of institutions of similar capacity, based on a set of agreed criteria. The AIF will be administered based on the agreed procedures spelled out in detail in an Operations Manual (OM).

30. The Fund will allow financing a variety of expenditures such as faculty staff training (including PhD scholarships as part of a departmental long-term training plan), academic collaboration, procurement of goods and services, and small renovation and refurbishing of lecture/study rooms, laboratories, and workshops. Since it is a demand-side intervention, only non-eligible expenditures are comprehensively listed in the OM. Outside of this list, all activities contributing to the achievement of expected results and measurable impact are, a priori, eligible.

Component 2 – Building Institutional Capacity (Total: US\$4.4 million; IDA: US\$4.1 million)

31. The objective of this component is to reinforce the strategic and institutional capacity of the sector, both at the central level and at the level of Higher Education Institutions (HEIs). The component includes the following sub-components: (i) improving the strategic capacity of UGC; and (ii) strengthening universities' institutional capacity. The thrust of this component is to bring the supply-side support which is needed to make universities and higher education authorities more efficient. It is also expected to allow the first component to yield its full benefits, and to facilitate the formation of externalities.

Sub-Component 2.1 – Improving the Strategic Capacity of UGC

32. This sub-component aims to endow the UGC with the human and information resources needed to steer the higher education sector, and to bestow the Commission with the capacity to strategize the future development of the sector. To this end, the project will support the following activities: (i) capacity building for strategic planning in the higher education sector; (ii) development of a higher education management information system; and (iii) upgrading of UGC management capacity.

(a) Capacity Building for Strategic Planning

33. In order to establish the capacity at the UGC to carry out strategic sectoral planning, the Project will support the establishment of a Strategy & Policy Unit, directly under the UGC Chairman. The Unit will be responsible for formulating strategies for the entire higher education sector (including Affiliated Colleges). It will carry out and/or commission studies laying out the analytical grounds for long-term reforms in the sector, with the windfall benefit of also preparing the foundations for further support by Development Partners. Specifically, the Project will finance hardware and software necessary for the Unit to fulfill its mandate, and technical assistance activities in the areas of strategy formulation, information-based decision-making, and institutional performance evaluation. Activities will also include workshops, consultations, in-country and international training and conferences.

(b) Development of a Higher Education Management Information System

34. A Higher Education Management Information System (HEMIS) will be established. The HEMIS will be used as an effective tool to support planning, monitoring and evaluation of the performance of the sector. It will also help evidence-based policy development and will contribute to improve HEIs' operations. The HEMIS is a set of computer applications meant to: (i) collect, store, process and disseminate data related to different managerial and academic aspects of the universities such as students' performance, curricula, lectures, alumni, academic staff, students' social affairs, etc.; (ii) support administrative and managerial information flows, and (iii) provide institution management and various academic and non-academic departments with timely and reliable information.

35. HEMIS will be developed in two phases: a national level HEMIS (N-HEMIS) that will be used as a system-wide planning, monitoring and evaluation tool for decision makers at the national level; and a university level HEMIS (U-HEMIS) that will be used as a management tool for university officials at the institution level. The N-HEMIS and the U-HEMIS will be interlinked, and the data from the U-HEMIS will feed into the N-HEMIS. During the project life, the N-HEMIS will be fully implemented, while the U-HEMIS will be piloted in a small number of universities and will include core modules (e.g. information on students, faculty, and financing). UGC will lead the development of HEMIS and will be its "institutional home". A HEMIS Unit under UGC will be established to carry out all the tasks related to the system development and day-to-day operations. The Project will finance the provision of hardware and software facilities in HEIs and at UGC, the outsourcing of specific tasks to specialized firms (design and development phases), and the training of university staff involved in the development of the system.

(c) Upgrading UGC Management Capacity

36. UGC was established to act as an intermediary between the government and universities and to regulate the affairs of the universities. However, the rapid increase in the number of both public and private universities and inadequate funding and human resources make it imperative that UGC's institutional capacity be enhanced so that it can enforce academic and financial discipline and perform its oversight responsibility. The Project will support provision of training on management and planning, IT, network, software, and other relevant facilities required to upgrade the management capacity of UGC.

Sub-Component 2.2 – Strengthening the Institutional Capacity of Universities

37. The objectives of this sub-component are to: (i) increase awareness about the AIF among the key stakeholders through appropriate media and communication campaigns with specific emphasis on academic innovation and institutional capacity enhancement; and (ii) strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of sub-projects for AIF

eligible public and private universities. As such, this sub-component is the direct counterpart of the AIF component and aims to buttress its satisfactory implementation.

(a) AIF Promotion

38. The objectives of these activities are to: (i) inform and sensitize the academic community about the availability of the AIF for innovative activities; and (ii) disseminate the concept of, and procedures for, the AIF, and thus build and increase awareness about different aspects of the AIF among all key stakeholders so that they can effectively compete for the fund – and make it work.

39. The awareness programs will follow a cascading arrangement. A pool of academics selected and trained by UGC, will lead the programs at divisional headquarters. The universities in the respective divisions will send representatives to these programs, who in turn will transmit the knowledge to the departments in their respective universities. UGC will prepare an awareness and promotion plan, and develop communication material. AIF awareness activities will take place immediately after Project Effectiveness (and again prior to the call for the second AIF round). The project will finance the development of the materials and the technical assistance needed for effective campaigns.

(b) AIF Training and Workshops

40. In order to strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of AIF sub-projects, three sets of training will be provided by UGC AIF Secretariat (UGCAIFS) for all AIF eligible public and private universities: (i) proposal writing; (ii) proposal evaluation; and (iii) sub-project implementation and management. In addition, separate training will be provided for the UGCAIFS staff on AIF implementation and management and workshops for the UGC Board for AIF (UGCBAIF) staff on their roles and responsibilities in management and oversight of the AIF. Two rounds of training (one for each batch) will be provided, and ad hoc training will also be organized for additional needs arising during project implementation, as well as remedial training for those departments and universities whose proposals failed to be approved in the first round.

Component 3 - Raising the Connectivity Capacity of the Higher Education Sector (Total: US\$34.0 million; IDA: US\$26.5 million)

41. The objective of this Component is to disenclave Bangladesh universities and to integrate them in the globalized world of knowledge. The main activity will be the establishment of a Bangladesh Research and Education Network (BdREN). The project will also facilitate access to the global repository of knowledge through subscription to a digital library.

(a) *Bangladesh Research and Education Network (BdREN)*

42. The project will support the creation of the BdREN, a high performance Information and Communications Technologies (ICT) network providing connectivity among education and research institutions in both public and private sectors to enable academics, scientists and researchers engaged in higher education and research to communicate with their peers within the country. The network, with its state-of-the-art high performance with access to broadband internet connections at a reasonable price, will support geographically dispersed academics, scientists and researchers with reliable access to high-end computing, simulation tools and datasets. BdREN will also be connected with other regional and trans-continental Research and Education Networks (RENs) and thus link faculty and students of Bangladesh to the global academic community and learning resources. It will facilitate international collaborative research and will catalyze innovation in the country. Although it requires considerable initial investment, the BdREN is a cost-efficient alternative to conventional ways to boost connectivity and communication

within the academic community. Once established and operational for universities, it will be possible to extend the BdREN membership and increase its beneficiaries to affiliated colleges at a lesser cost.

43. Under the HEQEP, BdREN will establish its key infrastructure including the Network Operating Center (NOC), and Points of Presence (POPs). It will also support the establishment of Basic Campus Networks (BCN) in at least five public universities that currently have no such local area networks. BdREN will lease on a long term basis, backbone infrastructure from available providers in Bangladesh and the required bandwidth in order to provide approximately 100 megabits-per-second (mbps) connectivity to the higher education institutions first in Dhaka, and progressively in other locations across the country. BdREN will eventually be operated by a non-profit Trust organization with a board representing the user community, UGC, MOE and with other members co-opted for their expertise and position in the industry. This transition will take place toward the end of the project life. Shifting the responsibility of the operation to a Trust will allow full ownership of BdREN by the user community within the oversight of the regulatory authorities. The project will set up the NOC in a suitable location in Dhaka, and POPs in Dhaka, Rajshahi, Chittagong, Khulna and Sylhet. NOC will be equipped with essential servers, network maintenance software and tools, network equipment and highly skilled technical staff experienced in the operation and management of the network to develop and manage BdREN activities.

44. With a proper information campaign regarding the use of the facilities, it is expected that the prospect of an available and efficient BdREN will generate spontaneous demand from universities. In turn, AIF will respond to this demand, mostly from the university-wide window, which will accommodate sub-projects focused on establishing LANs and on-site connectivity. The dynamics triggered by the combination of these two components is expected to make BdREN a catalyst for communication amongst universities. In addition, BdREN will be key to development of a fast and efficient HEMIS.

(b) Digital Library

45. Some 20 universities and research institutions in Bangladesh are now accessing digital library facilities in a limited way and with very poor connectivity. To address this situation, HEQEP will facilitate access to the global repository of knowledge through subscription to a digital library on behalf of the participating universities by forming a consortium. A comprehensive study will be conducted during the first year of project implementation to decide on the modalities of subscription, integration with BdREN, the extent and composition of demand for electronic journals and books, and the state of connectivity of the universities. The study will also assess the usefulness of this subscription before the establishment of BdREN.

Component 4 - Project Management (Total: US\$3.2 million; IDA: US\$2.3 million)

46. The objective of this component is to ensure proper implementation, management, and monitoring and evaluation of the project. It would comprise two sub-components, aiming to reach this objective, namely: (i) project management; and (ii) monitoring and evaluation.

Sub-component 4.1 - Project Management Unit

47. The overall responsibility for the Project will lie with UGC, as the implementing agency. A Project Management Unit (HEQEPU) will be established at UGC in order to ensure smooth project implementation. HEQEPU will be led by a full time Project Director. It will be staffed with technical, procurement, and financial management (FM) staff (see Annex 6 for organograms of the project implementation structure). HEQEPU's main functions will be to plan, manage, implement and coordinate activities under the proposed project. Three new permanent units will be created at UGC (Strategy and

Policy Unit, HEMIS Unit, and ICT Unit). The Project will also draw on, and build the capacity of, existing units, to fulfill project-linked fiduciary activities (FM and procurement). Finally, four project-specific units will be created: UGCAIF Secretariat, Finance, Procurement, and Monitoring and Evaluation. In addition, various government and private specialized agencies will be called upon for specific tasks. The Project will finance technical assistance as required for management purposes.

Sub-component 4.2 - Monitoring and Evaluation (M&E)

Monitoring

48. The objectives of this activity are to: (i) systematically document all project inputs, processes, outputs, and outcomes; and (ii) link project interventions with outcomes to indicate the extent of progress and achievement of objectives. A set of core indicators for measuring inputs, processes, outputs and outcomes, with baseline and target values, will allow tracking the impact of the project. A comprehensive and integrated data monitoring system will be in place to ensure that all project inputs, process, outputs and outcomes are monitored from the very inception of the project. The tools and data sources include: (i) periodic progress reports on the sub-projects under AIF; (ii) progress/completion reports on all sub-components; (iii) periodic reports on disbursement, financial management and procurement; and (iv) university statistics currently collected by UGC (and through HEMIS in later years).

Evaluation

49. In addition to the evaluation built into the continuing monitoring of the project activities, a Satisfaction Survey will be carried out targeting students, faculties and employers of the AIF beneficiary institutes/departments in order to assess how the direct beneficiaries value the interventions under AIF. For each round of the AIF, the baseline survey will take place soon after the initial selection of winners, and there will be two follow-ups at mid-term and at completion.

50. The impact of the AIF will also be assessed through a comparison of outcomes between the AIF beneficiary population (treatment group) and the population not receiving the benefits of AIF (control group). Even though self-selection (since participation to AIF is voluntary) will not allow a rigorous randomized trial, such a comparison will allow a better grasp on the impact of the scheme.

51. In order to assess the project benefit an Effectiveness Evaluation will also be carried out. It will focus on the outputs of the interventions and will include a detailed baseline survey (involving both institutions and individual stakeholders), and follow-up surveys (one before MTR and another just before project completion) in order to measure the effectiveness of project interventions.

52. The Project will support the unit in charge of M&E and the technical assistance needed to perform M&E activities. The Satisfaction Survey will be outsourced to a specialized firm. Likewise, consultants will be procured for the third party effectiveness evaluation.

D. Lessons learned and reflected in the project design

53. The proposed HEQEP is the first large project in the higher education sector supported by any development partner in Bangladesh. Thus, most lessons incorporated in the HEQEP result from the experience gained by the Bank in its support of higher education in various countries.

(a) Buy-in- for Reforms

When the overall political landscape is volatile, universities are excessively politicized, and academic communities are resistant to change, top-down reforms are likely to fail. Instead, demand-side, initiatives supporting voluntary participation --such as innovation funds-- involving the stakeholders stand better chances of success.

(b) Innovation Fund

Benefits: (i) Well designed and implemented innovation funds do not only unleash faculty staff's creativity and innovative skills, they also help to create a new university-wide climate for good governance (i.e., improved accountability and transparency) and to promote positive attitudinal changes; and (ii) Innovation funds allow funneling resources to teaching and research in the fields considered national priorities and relevant to the economy.

Coverage: Higher education projects in countries where a large proportion of students are enrolled in private institutions are meaningful only if they include such institutions. Such inclusion is also beneficial to public universities which get exposed to different, often innovative, provision of services.

Design: Absolute objectivity, impartiality and transparency of the selection criteria and processes are prerequisites for innovation funds to be credible; aggressive awareness campaigns and relevant training ahead of time (and throughout) are also necessary; building procurement and financial management capacities at the university level is also critical as cumbersome procurement arrangements can stall the implementation of innovation funds.

(c) Higher Education Environment

Information: Lack of reliable and timely information can hamper policy makers' role in fostering the development of a relevant and cost-effective higher education sector; it can also mislead prospective students and make them vulnerable to unfair trade practices. To address this issue, the project will support the development of a Higher Education Management Information System.

Connectivity: When they are isolated from the global knowledge community, HEIs do not stand a chance to catch up with up-to-date, world class research, let alone to foster new indigenous research; RENs are becoming a standard instrument to participate in this global community and to access available resources in order to improve teaching and research and to incentivize students and faculty staff. Access to affordable and high speed connectivity brings educational opportunities to greater numbers of people;

E. Alternatives considered and reasons for rejection

54. A number of alternative approaches and designs were considered when preparing the proposed project:

A reform loaded project: A Project on sector-wide reforms was considered. However, given the extremely strong political sensitivity of the academic community (students and faculty), it was decided that the Project be prepared mostly as a demand-side intervention, with the voluntary participation of the stakeholders in a competitive scheme as its overarching principle. This approach is framed in a vision where HEQEP would be only a first step, which will demonstrate visible success, build a climate of trust, and lay the ground for a longer-term relationship. In addition, the seeds of systemic changes in the critical areas of governance and budgetary discipline are built in the AIF. Strengthening the analytical and strategic capacity of UGC is also meant to prepare systemic and informed reforms.

A Development Policy Credit (DPC): A DPC instrument (as in the case of lower levels of education) was considered. This would have been a logical instrument, had a policy-focused project been prepared. Since the latter was dropped, the DPC route was also abandoned, and instead, it was decided to use a SIL, better suited to a project aiming at piloting innovations in the higher education sector.

A project focused on access: As participation in higher education is still very low in Bangladesh, the team discussed the possibility of focusing the Project on enrollment expansion. While such an expansion is important, it was decided not to tackle it under this Project because: (i) international experience tends to suggest that ensuring quality and relevance of existing higher education institutions is as important as expanding the system; such an expansion is more likely to succeed if the health of existing institutions improves; in addition, when the academic credentials of secondary education graduates entering higher education are low, rapid expansion poses a risky challenge; and (ii) Bank's comparative advantage in supporting the creation of new institutions – which amounts to be supporting mainly infrastructure - is low.

Coverage: Universities are only a small segment of the higher education sector. Thus, the team considered a project encompassing the whole higher education sector, including in particular the Open University and the National University. However, a comprehensive project was rejected because it would have largely exceeded the IDA allocation, and it would have been very difficult to implement, given limited capacity. Instead, it was decided that universities being the driving force of the sector, the main component of the project (AIF) had to be focused on universities. However, the National University and the Open University do play an important role in producing intermediate levels technicians and professionals. Therefore, it is deemed that these institutions should be covered in a subsequent, dedicated intervention. In addition, the promotion of good governance through AIF and the enhancement of the capacity of UGC, particularly in the area of strategic planning, will have positive impact on the entire sector including the colleges. Once firmly established, BdREN will also be easily extended to affiliated colleges demonstrating interest in it.

Supply-side activities: At the beginning, both the Government and the World Bank contemplated the merit of building the Project on supply-side activities, decided on behalf of the stakeholders, by UGC and the MoE. This approach would have led to specific need assessments in a variety of fields, with the risk of not fitting with the real needs as perceived by the stakeholders who have an acute sense of academic freedom and a tendency to regard any initiative from above with suspicion. Therefore, it was replaced by a mostly demand-side project, hinging around AIF and complementary investments to improve connectivity, and endeavors to ramp up institutional capacity.

III. IMPLEMENTATION

A. Partnership Arrangements

55. Support to higher education has been discussed with other development partners (DPs). However, no other DP – be it bilateral or multilateral - has shown interest in moving into a large scale, systemic operation in this sector. Most other DPs – especially the bilateral ones - limit their interventions to scholarship programs for students and faculty (e.g. British Council and Commonwealth scholarships). Dialogue with the DP community will continue in view of rallying additional, targeted, support to the activities undertaken with HEQEP.

B. Institutional and Implementation Arrangements

Overall Arrangements

56. The MoE will provide overall guidance and policy support to the Project, and the overall responsibility for the proposed project implementation would lie with UGC as the implementing agency. GoB will establish an Inter-ministerial Project Steering Committee, chaired by the Secretary, MoE, which will provide policy directions, oversee overall project implementation, and carry out joint annual reviews. A Project Implementation Committee, chaired by the UGC Chairman will provide direct guidance to the Project Director and others involved in implementation of different components and resolve implementation issues. Implementation of sub-projects under AIF will be the responsibility of the entities receiving the award at the university level. Main implementation arrangements are as follows.

HEQEP Unit (HEQEPU)

57. HEQEPU will be mainly responsible for: (a) planning, coordination, implementation and monitoring of project activities; (b) procurement and financial management (FM); and (c) reporting on project progress. It will work closely with different divisions and units of UGC, particularly with the HEMIS Unit and the ICT Unit.

58. The HEQEP Unit would consist of four units, in addition to the main sections directly under the Project Director: (i) the Academic Innovation Fund Secretariat (UGCAIFS), headed by an AIF Coordinator, would be responsible for coordinating the implementation of AIF sub-projects and training and mobilization; (ii) a Finance Unit; (iii) a Procurement Unit; and (iv) a Monitoring and Evaluation Unit.

Other Units under UGC

59. Three new units will be created which will function directly under the chairman of UGC: (i) a Strategy and Policy Unit, responsible for carrying out strategic planning for the higher education sector; (ii) a HEMIS Unit to help monitor the performance of the higher education sector at large; and (iii) an ICT Unit to oversee ICT issues, implementation of BdREN, and digital library. These units will work closely with the HEQEP Unit.

60. Implementation of various activities for enhancement of capacity at UGC will be carried out by existing UGC structures to the extent possible. However, as many of the activities under the project are new and they require specific qualifications, the UGC line units will need to work closely with the HEQEP Unit.

Specific Arrangements for the AIF (Annexes 4 and 6)

61. A full set of committees and executive bodies will be created at the university level and at UGC. Some of them will have a purely administrative role, while others will be vetting bodies constituted of peers from the academia. The latter will enjoy complete independence from the former. The highest authority to take decisions on the AIF at the aggregate level will be the UGC Board for the AIF (UGCBAIF).

62. At the university level, the Director of Planning and Development (DPD) in public HEIs, or his/her equivalent in the private universities, will be the head of the University-AIF Secretariat (UAIFS). A University Project Screening Committee (UPSC) will be set up to initially screen sub-project proposals for conformity with universities' strategy and AIF guidelines. The actual assessment of proposals will be the responsibility of fully independent Area Review Panels (ARPs) assisted by external peer reviewers,

which will review the proposals based on a set of clearly pre-defined criteria spelled out in the Operations Manual. Based on the recommendations of the ARPs, UGCBAIF will make final decisions on the aggregate envelopes, but will not review individual proposals again.

Specific Arrangements for BdREN

63. In the long term, BdREN will be established as a consortium of participating universities and research institutes, under the leadership of UGC. The consortium will be established, owned and run as a registered non-profit Trust organization. The responsibility for governance of the BdREN consortium will lie with a Board of Trustees, chaired by the UGC chairman, comprising members from the UGC, public and private universities, MoE and Chief Executive Officer of BdREN among others. A Technical Advisory Committee will provide technical and management advice to the Board and the BdREN Office.

Project Implementation Manual

64. The Project would be implemented according to an agreed Project Implementation Manual (PIM). The PIM will include: (i) an Operation Manual (OM) for the AIF which will be developed as a self-standing module to help the UAIFS and the UGCAIFS; (ii) operation manuals for components 2 and 3; (iii) detailed agreed guidelines; and (iv) the Procurement Plan.

C. Monitoring and Evaluation of Outcomes

M&E Unit

65. A small M&E Unit (MEU) will be established under HEQEP and it will be dedicated solely to the M&E function. MEU will be responsible for all the activities related to designing, implementing and managing the M&E activities of the Project. The monitoring activities of sub-projects under the AIF will be managed by the MEU in close collaboration with each UAIFS and with the help of the UGCAIFS. MEU will also work closely with the HEMIS Unit. Designated program officers for activities under Component 2 will be responsible for generating periodic progress reports on the assigned activity. MEU will be responsible for (i) designing the types of information and analysis required; and (ii) ensuring timely submission of reports. MEU will analyze the data and information collected and disseminate the results of the analysis (including an annual synthesis report) to the main stakeholders. These reports will be complemented and validated by satisfaction surveys and third party surveys.

D. Sustainability

66. The Project will introduce a number of initiatives of considerable importance to the tertiary education sector in Bangladesh. The sector has been starved of funds for decades and has confined itself only to the bare minimum. The AIF will help unwind the potential of the universities never explored in the past. As a result of consultations held during preparation, the AIF scheme has generated considerable enthusiasm in the academic community. This enthusiasm, if sustained through proper implementation and transparent management procedures, would be a strong catalyst for continued future interventions of this kind. Past experience with innovation funds, from Chile, Vietnam, Ghana, and Sri Lanka suggests that HEIs value this mechanism and that higher education authorities and ministries of finance alike tend to retain the allocation principle beyond Bank supported projects. If the HEQEP is implemented successfully, there will be a strong demand to keep alive similar interventions.

67. Both institutional and financial sustainability are built in the design of the AIF. The former will be ensured by mainstreaming the institutions created to operate the AIF. The second will be addressed through incremental budgetary allocations – to be reflected in the MTBF-- to a competitive fund which

could be either the pure continuation of the AIF, the merging of the latter with the recently created Academic Research Fund, or a combination of the two.

68. The strategy regarding the sustainability of BdREN is two-pronged: (i) the creation of an independent Trust is expected to guarantee institutional sustainability; and (ii) a combination of increased budgetary allocations, subscriptions from HEIs, and the introduction of a cost-sharing scheme with end-users is expected to promote financial sustainability (mostly associated with maintenance & operational costs, and replacement costs).

69. In both cases, the fiscal sustainability of the Project will depend on the willingness of GoB to meet recurrent costs associated with the Project. In turn, such willingness will also be linked with longer term reforms to diversify sources of funds for the sector, and in particular with the introduction of some of cost sharing mechanisms with the beneficiaries of the AIF and the users of BdREN. The capacity built under the 2nd component, particularly in strategy and policy development, will lead to the development of options and initiatives which are expected to survive the project after its closing. Ultimately, the very success of the new schemes and investments supported by the project will be critical to their continuity beyond the project life.

E. Critical risks and possible controversial aspects

70. The attached table describes and ranks the risks associated with the proposed operation. It also spells out corresponding mitigation measures, and rates the residual risks after taking these measures. Country governance and political risks which are common to all sectors are particularly relevant in the higher education sector, traditionally a highly politicized one.

Table 1: Critical risks and mitigation measures

Risk factors	Description of risk	Rating^a of risk	Mitigation measures	Rating of residual risk
I. Operation-specific Risks				
Technical/design	Intense politicization and resistance against a World Bank-financed project in the higher education sub-sector may pose difficulty in implementing the proposed operation.	Likelihood: M Severity: H	<ul style="list-style-type: none"> The project will address core concerns of universities (i.e. quality and relevance and lack of funding) through an Academic Innovation Fund (AIF) which is completely voluntary. The AIF concept has created considerable enthusiasm at the universities, both public and private. Project will respond to the needs of universities for greater connectivity through BdREN and access to international journals and books through a Digital Library 	M
	Extending AIF support to private universities may become contentious	Likelihood: M Severity: M	Inclusion of both public and private universities in AIF has been agreed by MoE, UGC and ERD. An inter-ministerial meeting including MoF and Planning Commission has agreed to include the private universities.	M
	Wide variation in capacity and characteristics among universities may lead to an unfair competition for the AIF	Likelihood: M Severity: M	A set of criteria for grouping of universities in three tiers will create a level playing field on which universities of similar characteristics can compete with each other for AIF.	L
	Academic community's perception of objectivity and impartiality in awarding innovation funds may become an issue, especially amongst members whose proposal is rejected	Likelihood: M Severity: M	Operations Manual will explicitly describe clear assessment criteria. Besides, awareness campaign will cover these issues elaborately.	M
	Formation of review panels for the AIF may be based on political allegiance.	Likelihood: M Severity: H	A well-defined set of criteria for selection of panel members has been established	M
	Due to the limited scope of intervention, project may not lead to any systemic changes in the higher education system of the country	Likelihood: H Severity: M	At this stage, a major systemic change is not expected. However, AIF would allow piloting and evaluation of a number of interventions which, if successful, can be scaled up by the Government later and may then lead to systemic change. Besides, capacity enhancement at UGC would have a sustained and long-term impact in the sub-sector in terms of oversight, monitoring, policy and planning	L
	Because of sporadic and innovative interventions of uncertain nature under AIF, it might be difficult to measure or quantify the project outcomes.	Likelihood: M Severity: L	An elaborate mechanism will be in place for rigorous monitoring and evaluation, baseline and impact surveys in different phases. These in addition to information from the HEMIS introduced through this project, are expected to generate enough information to evaluate the outcomes of the project. An elaborate results monitoring framework has also been worked out	L
	The financial model of BdREN may become untenable if significant numbers (at least 50) of institutions are not	Likelihood: M	Both private and public universities will be included to ensure a critical mass. The BdREN will transition into a consortium model with	L

				adequate cost recovery mechanisms in place		
	participating.	Severity: H	Likelihood: M Severity: M	An academic usage policy and various monitoring and enforcement mechanisms will be in place from the start to ensure proper usage. BdREN will connect to commercial internet only via specified gateways and monitor the traffic content.	L	
	In absence of cost effective underground fiber, the Dhaka backbone for BdREN may have to use exposed fiber which are less reliable than underground fiber and subject to damage.	Likelihood: H Severity: H		BdREN Dhaka backbone will be built with high level of physical redundancy in topology. Current budget affords 15 year overhung fiber at current market price. BdREN will commit this fund in installments with a switchover option in contract. Hence, as soon as the joint infrastructure initiative is taken, BdREN can acquire/ switch to underground fiber.	M	
	Inadequate technical capacity and resources for operation and maintenance of BdREN leading to ineffective use of the facilities	Likelihood: M Severity: H		BdREN will be operated and maintained by a separate technically qualified BdREN office and subsequently, a Trust that will have the financial and managerial autonomy and resources to operate the network. BdREN will receive support from a peering organization to assist with technical and operational issues.	L	
	Delays in the establishment of BdREN as a non-profit Trust	Likelihood: M Severity: L		Agreement will be reached on a target date for the establishment of BdREN as a non-profit trust within project implementation period. Project will provide technical assistance to carry out requisite preparatory work for the establishment of trust organization.	L	
	Despite availability of BdREN, universities will not utilize facilities provided	Likelihood: M Severity: M		BdREN will be professionally run and will provide a variety of services to HEIs. BdREN Board of Trustees will have broad stakeholder participation that will encourage usage among institutions.	L	
Implementation capacity and sustainability	<u>Central level:</u> UGC's lack of adequate human resources and experience in implementing a project of this magnitude and complexity may cause implementation delays. <u>University level:</u> Capacity at fund recipient entities in implementing and managing the AIF-funded activities may be inadequate.	Likelihood: H Severity: H		<ul style="list-style-type: none"> An adequately resourced HEQEPU will be created under UGC with considerable autonomy, and will be staffed with competent technical specialists and managers based on the agreed TORs. Specific technical assistance support and appropriate training will be provided to HEQEPU and UGC staff. Training and support will be provided for implementation and management of AIF-funded activities (sub-projects) and comprehensive monitoring mechanism will be in place.	M	
Financial management	Lack of adequately trained FM personnel, absence of computerized accounting system and weak bank reconciliation practice at UGC may affect preparation of timely and accurate financial reports. FM capacity at universities varies.	Likelihood: H Severity: H		Two focal accounting staff will be trained at HEQEPU on financial management and disbursement requirements of World Bank. A Financial Management Action Plan will be developed to improve FM practice. <ul style="list-style-type: none"> A Financial Management Questionnaire (FMQ) has been developed to assess universities' FM capacity. A financial management framework will be designed with a benchmark fiduciary requirement for AIF participating universities 	S	

Procurement	Insufficient procurement capacity at UGC.	Likelihood: H Severity: H	Procurement management capacity will be enhanced at UGC as follows: (i) a full-time procurement focal point (PFP) will work directly under the PD who would undergo procurement training at local and international level, (ii) two local procurement consultant (PCs) will be recruited at UGC to provide procurement support in review of procurement actions by AIF beneficiaries and ensure sustainable capacity building of UGC and beneficiary level, (iii) At UGC level, the PFP will become mandatory members of bid and proposal evaluation committees (BEC/PEC) with one PC attending all meetings of BEC/PEC; and (iv) A Procurement Risk Mitigation Plan (PRMP) will be agreed with provisions of monitorable performance indicators and quarterly reporting.	M
	Procurement capacities at different universities vary. Also the procedures are different at public and private universities.	Likelihood: H Severity: H	It will be clearly stated at the outset that all beneficiaries, since they will be using public fund, shall follow IDA's Procurement Guidelines and Government's Public Procurement Act 2006 (PPA) for its procurement activities under this project. While submitting applications for funding from this project, each applicant will assign a designated procurement/purchasing officer (DPO) from their institute to have regular liaison with UGC's PFP and PCs. DPOs will receive periodic training on procurement and guidance for developing procurement plans, bidding/proposal documents, evaluation reports and contracts. A subsidiary PRMP will form part of the grant agreement between UGC and any beneficiary.	M
	Corrupt or similar practices to secure AIF or other funds under this project	Likelihood: H Severity: H	Regular post-reviews of beneficiaries' procurement actions will be monitored by UGC/IDA. Considering the typical political economy in Bangladesh, subsidiary PRMPs will incorporate disincentives for corrupt or similar practices and punitive measures for proven wrongdoing in accordance with the PPA	M
Social and environmental safeguards	Some sub-projects in the areas of Physical, Biological, and Earth Sciences, Engineering and Technology, Medical, Health, and Nutritional Sciences, and Agriculture, Livestock and Fisheries may have potential environmental issues	Likelihood: M Severity: M	Each sub-project proposal will include a filled-out environmental checklist which would reveal any potential environmental risks and their mitigation measures. Besides, the EMF provides guidance on the approach to be taken during program implementation for environmental screening and if required for environmental management plan	L
Other ^b	The University Grants Commission will be positioned in a new role (i.e. responsible for implementation of the project and increased strategic role) which might create a tension with MoE	Likelihood: L Severity: M	The Project Preparation Team, the Project Inter-ministerial Steering Committee and UGCBAIF combine membership from both institutions.	L
II. Overall Risk (including Reputational Risks) - based on mostly on operational risks				
Memo items:				
1. CPJA ratings (overall and four clusters)				
2. IEG rating (% of projects rated unsatisfactory—MU, U, or HU—over last five years both for the country portfolio and the sector)				
Other governance and corruption indicators such as those prepared by WBI and Transparency International				
Rating of risks on a four-point scale according to the probability of occurrence and magnitude of adverse impact. The rating is: L=Low, M=Moderate, S=Substantial, H=High.				
^b Other examples include cost escalation, prevalence of failures in similar projects, adverse external developments affecting costs/benefits of the project, and risks specific to operations in conflict-affected areas.				

F. Credit conditions and covenants

Project Management and Institutional Arrangement

71. The Government shall carry out the Project in accordance with the PIM, and except as the Association shall otherwise agree, the Recipient shall not amend or waive any provision thereof if, in the opinion of the Association, such amendment or waiver may materially and adversely affect the implementation of the Project.

72. The Government shall maintain, until the completion of the Project, an Inter-Ministerial Project Steering Committee, to be chaired by the Secretary of MOE, and including representatives from different agencies involved in the implementation of the Project, to provide policy directions, oversee overall Project implementation, and carry out annual reviews.

73. The Government shall maintain, until the completion of the Project, a Project Implementation Committee, to be led by the UGC Chairman, and including representatives of MOE, Eligible Beneficiaries, and HEIs, to provide guidance to those involved in the implementation of different activities under the Project and to facilitate the resolution of implementation issues, if any.

74. The Government shall maintain until the completion of the Project, within UGC:

(a) an adequately staffed Project Implementation Unit headed by a full time Project Director, who shall be accountable to the Chairman of UGC and be responsible for: (i) planning, coordination, implementation and monitoring of Project activities; (ii) carrying out of procurement and financial management for the Project; and (iii) reporting on progress of the Project;

(b) a UGCAIFS, headed by a Coordinator, to be responsible for coordinating the implementation of Sub-Projects, and training programs and mobilization in connection with such Sub-Projects; and

(c) a UGC Board for AIF responsible for overseeing the Sub-Project activities and making final decisions on AIF allocations.

75. The Government shall cause UGC to create by June 30, 2009, three new units as a part of UGC's regular organizational structure, with terms of reference satisfactory to IDA, including: (i) a Strategy and Policy Unit, responsible for carrying out strategic planning for the higher education sector; (ii) a HEMIS Unit to help monitoring the performance of the higher education sector at large; and (iii) an ICT Unit to oversee issues related to information, communication, implementation of BdREN and digital library.

76. The Government shall cause UGC to prepare and circulate, no later than 30 days after the Effective Date, a guidance note outlining the financial management functions and staff responsibilities within the HEQEPU, the UGCAIFS, and within the entities specifically carrying out the Sub-Projects.

77. The Government, through UGC, shall: (i) make each grant available to an eligible beneficiary under a Performance Contract on terms and conditions approved by the Association; the contract will be signed by UGC, participating institution and the entity in-charge of carrying out the proposed Sub-Project; and (ii) cause every Higher Education Institution (HEI) receiving funds under AIF to establish and maintain until completion of all sub-projects, an AIF Secretariat or its equivalent, with Terms of Reference acceptable to IDA.

78. The Government shall cause UGC to enter into service agreements with participating HEIs, in form and substance and terms and conditions agreed with IDA, to ensure adequate provisioning of BdREN services to HEIs.

79. The Government shall cause UGC to make all necessary legal, administrative, and institutional measures to constitute a trust that will manage and operate BdREN.

Accounts/Audit

80. The Government shall: (i) furnish to IDA quarterly interim unaudited financial reports for the Project within 45 days from the end of each calendar quarter in form and substance satisfactory to IDA; and (ii) furnish to IDA audit reports conducted by independent auditors within six months from the end of each fiscal year.

81. The Government shall establish, by no later than June 30, 2009, an audit committee, whose composition and terms of reference shall be satisfactory to IDA.

Anti-corruption

82. The Government shall carry out the Project in accordance with the provisions of the Anti-Corruption Guidelines.

Monitoring and Evaluation, Research and Reporting

83. The Government, through UGC, shall: (i) monitor and evaluate the progress of the Project and prepare Project reports on the basis of the indicators agreed with IDA. Each report shall cover the period of one calendar semester, and shall be furnished to IDA within 45 days after the end of each period; and (ii) carry out a joint Mid-Term Review with IDA, by July 2011, or at a later date if requested by IDA.

Environment and Social Covenants

84. The Government shall comply with the agreed Environment and Social safeguards.

Private Universities

85. In the case of a private university, such private university, to be eligible for AIF, will provide matching funds of twenty percent of the Sub-project cost.

Disbursement conditions

86. No withdrawal will be made for: (i) payments for grants under Category 1, unless the expenditures are eligible and have been made in conformity with the criteria described in the PIM; and (ii) payments for training costs under Disbursement Category 4, unless the training course is included in the training plan and the list of participants have been cleared by IDA.

IV. APPRAISAL SUMMARY

A. Economic and financial analyses

87. **Economic Analysis:** Two specific approaches were taken with regards to the two main components, namely the AIF and the BdREN. Regarding the first one, a cost-benefit analysis is carried out, based on the projection of incremental gains expected from the scheme and of its associated costs. The analysis points to significant positive returns. For example, in the base case scenario, the internal rate of return for AIF is estimated at 17.9 percent and in the highest case scenario, it is estimated to reach 28.1 percent.

Sensitivity analysis also suggests that, within expected limits, returns remain positive. As far as the BdREN is concerned, a cost efficiency analysis is applied. It shows that the intervention has a clear advantage over using conventional means in order to deliver higher and more reliable connectivity, therefore producing net cost savings associated with a better service.

88. **Fiscal Sustainability Analysis:** The future financial impact of the Project is assessed, and weighed against the predictable expenditures (current and development) on higher education, and especially on universities. Based on alternative assumptions on the current pattern of sources of funding (public funds/universities revenues/private contributions, etc.), the analysis shows that continuity of both the AIF scheme and the BdREN after project completion will remain affordable. It, however, suggests that such affordability is highly dependent on the capacity of the sector to generate additional funding from various sources, including HEIs themselves and end-users.

B. Technical

89. **AIF - Leveling the playing field:** The essence of an innovative fund is to reward quality and innovation by establishing a link between performance and funding. This is achieved by propelling competition amongst universities for additional resources. A level playing field must be ensured to that effect. Currently, however, Bangladesh's universities are at various levels of development. The old four, pre-independence universities have disproportionately large academic capacity and size compared to those which were founded after independence. The recently established universities are yet to evolve into fully developed institutions with the required academic infrastructure. Again, there are significant differences in respect of academic capacity and infrastructure facilities between the public and private universities and even among the latter. Therefore, in order to ensure equitable opportunity and distribution of AIF resources among these universities with diverse level of capacities, they are being clustered in three groups, each with some degree of homogeneity in academic capacity. Only the universities in the same group will compete with each other.

90. **AIF – Evaluation Criteria:** Evaluation of the proposals submitted by academic departments is not an administrative activity. It will be the responsibility of the independent ARPs. Yet, the Panels need a set of criteria to come up with as objective assessments as possible. The criteria laid out for the AIF are as follows : (i) clarity of strategic analysis and objectives, (ii) quality and clarity of the milestones and performance indicators, (iii) relevance to the country, (iv) clarity and justification of the proposed budget, (v) quality of the management plans, (vi) institutional commitment, (vii) quality and clarity of the impact analysis, and (viii) academic and financial sustainability

91. **Self Assessment:** Self-assessment allows an institution to discern clearly its strengths and areas for improvement. In view of the absence of an institutional culture of self-assessment in tertiary education in Bangladesh, the Project will both provide funds and help the institutions internalize the process of self-assessment. The process would include five phases: (i) preparation, (ii) implementation, (iii) external validation, (iv) final report, and (v) orientation for change management -- each with a plan for execution. Of particular importance is the phase of external validation which would provide the universities with much needed dispassionate feedback from the larger academic community. Participation in self-assessment is completely voluntary, and is embedded in the Teaching and Learning window of the AIF. It is expected that institutions will learn from their own experiences, and that a culture of self-assessment will progressively percolate in the academic community, to become a standard feature of academic life.

92. **HEMIS:** Two interrelated components will be developed: (a) the National HEMIS (N-HEMIS)) will be designed to produce a set of sector-wide performance indicators that will allow UGC/MoE to identify the strengths and weaknesses of the higher education sector. The data will be disaggregated at different levels as appropriate and needed (e.g., national, by public/private, by subject areas, by university); and (b)

the University HEMIS (U-HEMIS) –which will feed data to the N-HEMIS, will be developed along four modular approaches: (i) A student module that covers registration and management of student information from university entry through the student’s graduation and beyond; (ii) A human resource module that includes academic and non-academic staff information such as their qualifications, years of experience, expertise, publications, etc; (iii) A finance module that includes budgeting, spending, and accounting; and (iv) An integrated data module that draws data from other modules, produces KPIs, and allows trend analysis and comparisons among departments and faculties.

93. **BdREN:** A state-of-the-art national research and education network (REN) infrastructure is being designed in a way to provide 100 mbps network connectivity with basic quality-of-service assurance to all public universities, interested private universities, and selected research organization by 2012. A BdREN office will be established in order to operate the network. The BdREN will maintain its networking instruments such as own routers, switches and various network management devices. It will operate a set of backbone and access links that would connect these switches and customer routers. It will connect with other national internet exchange and other national provider networks. It will also join global network of RENs (currently about 90 worldwide). Links needed for backbone, access and linking with others will be owned. The REN will run a Network Operation Center (NOC) to monitor and manage the operation of the entire network. It will also run a set of network services which can include access and authentication systems, packet shapers, firewalls, distributed caching, multi-casting, VPN, bandwidth on demand, etc., to improve the overall network service. The proposed BdREN will also include campus network infrastructure, either through upgrading existing facilities or new installations, particularly in the public universities which do not have state-of-the-art campus network.

C. Fiduciary

Financial Management

94. The adequacy and quality of the financial management system and continued assignment of FM staff with adequate qualifications and appropriate experience both at UGC and the higher education institutions receiving AIF funds are essential for successful implementation of this project. The assessment reveals a lack of adequate FM capacity at both levels.

95. UGC’s FM system and capacity will be strengthened to meet the project financial management requirements. As such, to effectively perform the project financial management task that would involve transfer of funds to multiple HEIs, ensuring that funds are used for the intended purpose, arranging replenishment on a timely basis and accounting and timely reporting of receipt and usage of fund, UGC will appoint a professionally qualified accountant with adequate experience on GoB and IDA financial management procedures as Financial Management Specialist (FMS) in the HEQEP Unit. The TORs for the FMS have been agreed with the Bank, and the process to identify the person will begin before negotiation so that s/he can be in place right from the beginning of the project. UGC also identified two members of accounting staff to be fully engaged in this project. They will be trained on FM and Disbursement requirements of the World Bank. These identified accounting staff members will assist the FMS and be guided by him/her in discharging the assigned project financial management functions to be detailed in their job descriptions.

96. The FM capacities of most public universities and some of the private universities are also inadequate. The public and private universities that would implement sub-projects under AIF would be required to have the appropriate FM capacities. A Financial Management Questionnaire (FMQ) has been developed, for the purpose of assessing the FM capacities and systems of the universities that would be eligible to submit proposals under the AIF. The FM capability of each university will be assessed on the basis of the responses to the FMQ to be submitted to the Bank. The universities that would be assessed as

having FM capacities below a benchmark would be required to agree on and implement an FM Action Plan to be eligible to access funds under the AIF.

Procurement

97. Bangladesh has undertaken procurement reforms which are a major step forward in improving the public procurement environment. Though key policy reform actions have already been completed, including mandating the new procurement act/rules, with associated procedures and all documentation, implementation of the national procurement act is still a key challenge. There are still a number of potential governance, institutional, and implementation challenges, including some problems with enforcement of regulations, procurement approval process, contract administration, delays in contract awards, allegations of irregularities, and political interference. Considering all these factors, the procurement under the Project remains a challenge requiring special measures to address associated risks (see Annex 8 for more details).

98. **Procurement Risks and Measures:** The Project is considered as a “high risk” operation from a public procurement point of view, considering the possibility of political interference in the decision-making process of HEIs and UGC. The assessment is based on the general environment for public procurement in the country as well as the procurement capacity at UGC and HEIs. A number of special measures are underway in the country, and as part of the ongoing procurement reform, the second follow-on reform project under implementation is expected to make the reform efforts sustainable. Concurrently, several measures will be specifically introduced in this project to minimize procurement risks.

99. **Procurement Responsibility:** All procurement related to the AIF will be the responsibility of universities. A four level mechanism will be set up to review AIF procurement to ensure it is properly done. UGC will be responsible for all procurement of goods, works and services related to the other components.

D. Social

100. **Participatory Approach:** Given the political sensitivity of the tertiary education sector, UGC has taken a comprehensive participatory approach in designing the Project. It has organized a number of workshops involving different stakeholders on issues that would have significant bearing on the design of the project and on the academic community. Inputs from those workshops have been reflected in the design. While competitive funds have been used in higher education systems in many countries, the AIF was customized based on the inputs from the stakeholders. Besides, participation in the competition for the Fund is made totally voluntary so as to mitigate potential risks for political resistance.

101. **Planned Social Outcomes:** The Project, with its aim to enhance the quality of higher education and research in the country, is expected to have a significant impact on scientific innovation and expansion of the knowledge base, which would have a cascading effect in every sphere of life. More specifically, the Project is expected to better prepare higher education graduates enrolled in beneficiary universities for the job market. The Project will be neutral from an equity point of view, as it will not deal with access issues, and therefore, it will not affect the distribution of students by socio-economic background (the elitist nature of higher education in Bangladesh is mainly the outcome of the selection process which takes place at the secondary education level, and it must be tackled primarily at this level).

102. HEQEP will implement an awareness campaign to include universities of both metropolitan and non-metropolitan areas. The AIF will contain a mechanism to ensure a level playing field for all universities-- public and private—meeting the minimum criteria. This will broaden the scope of the benefits reaching a wider section of stakeholders in higher education. Finally, as the BdREN will reach out progressively to all HEIs in the country, it will contribute to the inclusiveness of the project.

E. Environment

103. The proposed HEQEP is intended to enhance the quality of higher education in teaching, learning and research and build institutional planning and management capacity. The activities identified under the Project are mainly technical assistance. No major infrastructural activities are proposed. It will not require any acquisition of land, construction of any new building or any major physical expansion. The proposed project may finance, among other things, small infrastructure renovation/refurbishing construction. These small scale construction activities, mostly on the existing structures in order to provide better facilities, are not anticipated to cause any major environmental impact.

104. Considering the nature and magnitude of potential environmental impacts from relatively limited scale and magnitude of the renovation/refurbishing construction works and academic research work, the HEQEP will be classified as category 'B'. Since the extent and exact locations of reconstruction works and research works are not known at this stage and may not be known at appraisal, the requirement to carry out an environmental analysis as part of project preparation has been waived. However, for sub-projects with potential adverse impacts, a limited environmental analysis/screening will be done during project implementation prior to approval of any sub-project. Since the potential environmental impacts are expected to be minimal, an Environmental Management Plan (EMP) will be prepared only for each relevant activity. If any land filling is required for research site preparation such as filling of low lying lands, a full Environmental Impact Assessment (not only an Environmental Management Plan) will be a condition for IDA financing.

105. The sub-project proponents (public and private universities, their faculties, departments, centers and institutions fulfilling eligibility criteria) will use a sample checklist (included in the OM) to identify any environmental issues in the infrastructure renovation/refurbishing construction works. If there is any environmental issue identified, the sub-project proponents will add an EMP with their proposal. For research activities, the applicant of the research proposal⁷ will submit an environmental checklist duly reviewed and signed by proposed supervisor and departmental head. If there is substantive environmental impact, the applicant will submit the mitigation measures for the activities.

106. The Environment Management Framework (EMF) was prepared for the project. It was disclosed in both Bangla and English on the Ministry of Education (www.moedu.gov.bd) and UGC (www.ugc.gov.bd) websites in August 2008.

F. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
<u>Environmental Assessment (OP/BP 4.01)</u>	[x]	[]
Natural Habitats (<u>OP/BP 4.04</u>)	[]	[x]
Pest Management (<u>OP 4.09</u>)	[]	[x]
Physical Cultural Resources (<u>OP/BP 4.11</u>)	[]	[x]
Involuntary Resettlement (<u>OP/BP 4.12</u>)	[]	[x]
Indigenous Peoples (<u>OP/BP 4.10</u>)	[]	[x]
Forests (<u>OP/BP 4.36</u>)	[]	[x]
Safety of Dams (<u>OP/BP 4.37</u>)	[]	[x]
Projects in Disputed Areas (<u>OP/BP 7.60</u>)*	[]	[x]

⁷ The research proposals under Arts, Humanities and Social Sciences' and Business and Management' windows will not require the submission of the checklist, unless review committee asks for the checklist.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

G. Policy Exceptions and Readiness

107. No policy exception has been sought. UGC will implement the project. The fiduciary arrangements for HEQEP are being put in place. GoB has demonstrated its commitment through active engagement, preparation of the higher education strategy and ensuring engagement of the relevant stakeholders. Disclosure requirements are being met; and monitoring and evaluation arrangements are being put in place (including baseline and target values of indicators).

Annex 1: Country and Sector or Program Background
BANGLADESH: Higher Education Quality Enhancement Project

I. Background⁸

1. Bangladesh, with 145 million people and a per capita GNI of US\$599 (provisional in 2007-08), has recorded substantial progress in poverty reduction and selected human development outcomes. Significant progress has been made towards achieving the Millennium Development Goals (MDGs), particularly with regard to increasing access, both at the primary and secondary levels. The net primary school enrollment rate increased from 62.9 percent in 2000 to 66.5 percent in 2005⁹. Increases were also observed at the secondary level (enrolments have more than doubled since Independence). Gender parity has already been achieved at both the primary¹⁰ and secondary education levels. Economic growth is strong, with GDP growth rates ranging from 5.3 percent in 2002-03 to 6.6 percent in 2005-06 and 6.2 percent in 2007 (provisional).

2. IDA's support for education has focused mainly on the basic education sub-sector including the support given to secondary education largely through the female secondary stipends program over the last decade and through budget support for policy reforms in more recent years. For the country to build on its painfully won achievements and to take off in economic and human development terms, it is urgent that the country's need for leaders, managers, innovators, and technical experts be met. The government has recognized that increased enrollments at the primary and secondary levels is putting additional pressure on the tertiary system, and has acknowledged the importance of developing a quality tertiary system to ensure sustainable economic growth and to boost the country's competitiveness in the global economy.

3. Currently, this competitiveness is at a low level. Bangladesh is behind neighboring countries in many aspects of education and research. Bangladesh allocates only 2.1 percent of its GDP and 12.4 percent of its public expenditure to the education sector, and tertiary education receives only 0.12 percent of GDP and 7.1 percent of the total education expenditure (non-development). This meager spending on education is linked to low secondary and tertiary enrollment rates and low quality at these levels of education. Employment opportunities are limited, and the level of economic and human development is still very low. The skill level of the labor force is still extremely low, especially in rural areas and for women. If Bangladesh wants to ramp up its economic performance, it will need to boost investment in its human resource development (Figure 1). The observation "raising labor productivity is critical for both growth and job creation in South Asia"¹¹ applies particularly to Bangladesh.

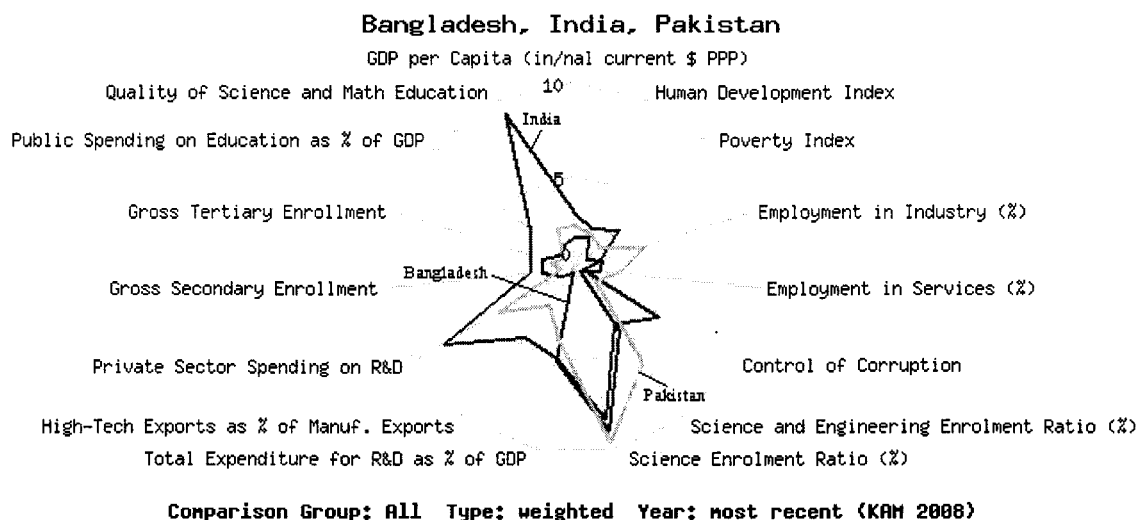
⁸ Several sources are used for this section: (a) Bangladesh Economic Review 2008. Economic Advisor's Wing, Finance Division, Ministry of Finance; (b) HIES (2005); (c) Education for All In Bangladesh, The World Bank (2008); (d) 33rd Yearly Report, Bangladesh University Grants Commission; and (e) Non-development Budget 2008-09, Bangladesh University Grants Commission.

⁹ Source: Education for All In Bangladesh: Where does Bangladesh Stand in Achieving the EFA goals by 2015. The report uses HIES (2005). Reliability of administrative education data in Bangladesh is limited. HEIS data—at least for primary and secondary levels—are preferred.

¹⁰ In Bangladesh, the primary level consists of grades 1-5, while secondary level consists of grades 6-10.

¹¹ "Accelerating Growth and Job Creation in South Asia", World Bank 2008

Figure 1: Bangladesh is behind its neighboring countries in many aspects of education and science, resulting in poor economic and human development.



Source: KAM (http://info.worldbank.org/etools/kam2/KAM_page3.asp)

Note: Knowledge assessment methodology indicators (Bangladesh in red, India in green, Pakistan in yellow)

4. The MoE has the overall responsibility for policy formulation, strategic leadership and preparation of budget for public funding in higher education. In 1973, it commissioned the University Grants Commission (UGC), the oversight apex body for all public and private universities, as the intermediary between the Government and the universities for regulating the affairs of the universities. Now 81 universities - 30 of them public and 51 private - provide four types of higher education in the country: (i) general education; (ii) science, technology and engineering education; (iii) agricultural education; and (iv) medical education.

II. Main Sectoral Issues

5. The tertiary education sub-sector currently faces many deeply rooted and intertwined challenges. These include: low quality of education; limited access to tertiary level institutions; low level of research; weak governance and management practices; weak sector planning and monitoring capacity; inadequate funding level and mechanisms. All these challenges are compounded by the fact that they occur in a sector characterized by a high level of politicization.

6. In view of these challenges, the Government prepared a Higher Education Strategic Plan 2006-26 which was fully home-grown with participation of front-line academics from both public and private universities and representatives from think-tanks and the private sector. This Plan, widely recognized as a ground-breaking initiative signaling a strong commitment by the government to enhance investments in higher education, comprehensively identifies issues and challenges (some of which are described below) and recommends solution to the problems to be tackled over a period of 20 years

7. **Access:** While about 44 percent of Bangladeshi children progress to lower secondary education, only approximately 27 percent continue to upper secondary education; only 16 percent complete upper secondary; and no more than about six percent of the eligible age cohort continue on to

universities, degree colleges, or other forms of tertiary education (World Bank 2000). Despite the recent growth of private universities and considerable increase in enrolment in these universities (they currently cater for 51 percent of the student population), this tertiary enrollment rate is one of the lowest in the world. It is in sharp contrast with 50 percent in industrial countries, and 20-30 percent in Latin American countries, but is similar to the enrollment rates in Pakistan and many countries in Sub-Saharan Africa. A large part of the low tertiary enrollment can be attributed to earlier selection at pre-tertiary levels and to poor quality of education at these levels.

8. **Quality and Relevance:** There are growing worries over the quality of provision in the private and public sectors, particularly in some of the newer private universities and in the vast number of colleges under the wing of the National University. Most of the universities do not have access to the latest books, journals and research articles. The poor quality of English language and IT skills in many staff and students leads to their being cut off from much of the literature and electronic resources in their disciplines. Skill development opportunities for teaching staff are scarce. Lack of incentives generates lack of initiatives amongst departments and faculty staff. Curricula are outdated. Disciplines linked with growth-related sectors are under-represented. Graduates do not acquire the appropriate knowledge, skills and efficiency needed to perform in the labor market. In turn, employers' expectations regarding the value added of higher education are low. Enhancement of quality and relevance of higher education, both in public and private institutions, is now at the top of the agenda in the government's initiatives in higher education.

9. Currently, there is no tertiary level quality assurance system. Neither are there any known internal quality assurance cells within public universities. The Strategic Plan has proposed establishment of an independent Accreditation Council catering for both public and private universities, but this proposal has been met with resistance by a number of public universities.

10. **Research:** Bangladesh does not have a national strategy for research and the role of universities in undertaking research is affected by many constraints. There is no mechanism to link programs between universities and research institutes whether at home or abroad. Lack of efficient connectivity hinders communications between research centers and keep researchers isolated from each other and from mainstream and cutting edge research. Similarly, there are few links between the industry, business and higher education institutions in the key areas of research. Finally, there is a lack of an appropriate funding mechanism on a suitable scale to encourage basic and applied research in the universities and in different research organizations.

11. **Governance and Management:** The governance arrangements in some public universities and many higher education colleges allegedly fuel politicization of academic decision making and operations. The universities acts in the past were meant to promote academic independence of the universities. However, intense politicization of the higher education institutions has derailed the spirit enshrined in the acts and brought in a number of unintended results, particularly in internal governance practices. These relate, *inter alia*, to appointment of vice-chancellors, recruitment of teachers and their subsequent promotions, accountability at different levels, and supervision of academic performance. While correcting the governance malpractices is of utmost importance, making sure that any measure taken does not act/ is not seen as a ploy to curb academic freedom is equally critical. Finally, the fate of private institutions is still uncertain, and partnerships between the public and the private sector are at best rare, at worst marked by reciprocal disdain¹². So far, despite public debates about these ills, the Government has not been able to minimize them significantly due to the strong resistance of academic community to the reforms.

¹² This does not prevent faculty staff from public universities to complement their income by teaching in private institutions on a part-time basis.

12. **Strategic Capacity:** The UGC is not adequately staffed to effectively play its strategic role. Planning, Monitoring and Evaluation are conducted in an *ad hoc* manner, with incomplete, uncertain, and untimely information to base decision making. A system is not in place to collect data and to carry out studies on university graduates and labor market outcomes. It does not provide the sector (and the rest of society) with a long-term vision of where the sector is heading. Similarly, and to an even larger extent, universities also lack the staff and the capacity to lay out their own strategy and most of them largely live on a next day horizon. Good specific training suited to managing higher education institutions is not readily available.

13. **Financing:** In 2007/2008, Bangladesh apportioned about 2.1 percent of its GDP to education, and about 0.12 percent to tertiary education –a very low share by all standards. The low levels of government funding and the very high percentage of that funding allocated to salaries, lead to inadequate funding for equipment, computers, books and journals and building maintenance. The system is plagued by internal inefficiencies. Budget allocations to institutions are based on precedent or influence and not based on a strict formula applying across universities and linking funding with outputs. Budgets are transferred to universities in three categories: salaries and allowances, educational contingencies, and other contingencies. The university authorities have little flexibility in spending their budgets. They are unable to transfer funds across categories and any savings made are to be returned to the exchequer, thus discouraging any effort to improve cost-effectiveness of the system. Under severe budget constraint, activities of the departments and institutions at large are limited to the bare minimum. The inevitable casualty is any effort in quality enhancement.

14. Despite their potential as a major source of funding for universities, tuitions in most of the public universities are close to nil, especially in general public universities. The fee structure has not been changed for the last several decades, despite the Government's repeated attempts.

III. Looking ahead

15. The Higher Education Strategic Plan of the Government envisioned a growth strategy spanning over a period of twenty years to tackle the challenges regarding quality, access, governance, research, ICT development and funding for tertiary education. The Plan came up with a comprehensive set of recommendations. Some of the broader areas of recommendations, *inter alia*, are as follows:

Short-term measures:

- Establishing the network infrastructure and connectivity for a national education and research network and enhance ICT capacity;
- Umbrella legislation for all public universities to rid them of some of the governance problems;
- Promoting a culture of teaching quality and making courses relevant and of high quality;
- Creation of an appropriate funding mechanism to encourage research;
- Amendment to the Private University Act;
- Developing link program with universities and research institutes at home and abroad;
- Strengthening UGC with well trained human resources and improved logistics, in view of the changes in the sub-sector; and
- Support for PhD level studies.

Medium- and long-term measures:

- Formation of an impartial and apolitical national search committee to find competent vice-chancellors for public universities;
- Strengthening and reorganization of the composition of the university governing bodies to make them less politicized;
- Revamping the processes for recruitment and promotion of teachers and administrators;
- Setting up an Accreditation Council for public and private universities;
- Rationalizing the students' fee structure; and
- Setting up new universities.

16. Obviously, this is a huge agenda to be implemented over a period of 20 years. The HEQEP will contribute to address several issues targeted by the short-term recommendations, including the development of a research and education network through the BdREN, the introduction of good governance procedures, the promotion of academic quality, relevance and self-assessment, the rationalization of resource allocation mechanisms, partnerships and linkages within and without the sector, etc.

17. The Project will also prepare the grounds for decisions related to the medium- and long term recommendations. The Government has already started working on the governance issues, e.g., umbrella legislation, amendment to the Private University Act, recruitment of VCs following apolitical processes. Given the sensitivity of these issues, the Government has decided to tackle these issues on its own. For others, many of which demand sustained and long-term engagement, the Government has requested the Bank to provide support. The HEQEP is the most logical and timely response to this request. It will provide the needed additional financing, to go beyond the usual expenses of the universities in order to catalyze innovative activities and enhance teaching and learning and research as recommended by the Strategic Plan.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

BANGLADESH: Higher Education Quality Enhancement Project

Sector Issue	Project	Latest Supervision (ISR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
IDA-financed			
Increase equitable access to primary and secondary schooling, improve quality of education; and strengthen management capacity.	Bangladesh – General Education (Credit 2118-BD) – (Closed April 20, 1997) (OED evaluation: Satisfactory)	S	S
Improve and expand non-formal education; strengthen capacity to deliver programs through NGOs and district administration	Bangladesh – Non-Formal Education (Credit 2822-BD)(Closed June 30, 2001) (OED evaluation: Satisfactory), with ADB and SDC [US\$7.9 million]	S	S
Improve access to secondary education and improve opportunities for rural girls	Bangladesh – Female Secondary School Assistance Project (Credit 2469-BD) (Closed June 30, 2001) (OED evaluation: Moderately Satisfactory) [US\$63.7 million]	S	S
Improve school quality and system efficiency; establish a cost-effective and better managed education system; and ensure universal coverage and equitable access to quality primary schooling	Bangladesh – Primary Education Development (Credit N-038-BD) (closed December 31, 2003) (OED evaluation: Satisfactory) [US\$90.9 million]	S	S
Improve and expand non-formal education; strengthen capacity to deliver programs through NGOs , and improve links to labor market opportunities	Bangladesh – Post-Literacy and Continuing Education for Human Development Project (Credit 3467-BD, co-financed with Swiss Agency for Development Co-operation (SDC). Project is closed [US\$53.3 million]	MU	MU
Improve the quality of, and girls' access to secondary education in rural areas	Bangladesh – Female Secondary School Assistance Project II (Credit 3614-BD) [US\$ 120.9 million] Closing date: June 30, 2008	S	S
Improve access to educational opportunities for the disadvantaged, enhance education quality, and improve institutional capacity	Bangladesh – Primary Education Development Program II (Credit 3857-BD) with 10 other development partners, led by ADB [IDA = US\$150 million]	MS	MS
Address systemic governance issues in order to raise the quality and cost-effectiveness of service delivery, and improve equity of access to secondary education	Three phases: Education Sector Development Support Credits (ESDSC, ESDSCII & ESDSCIII) [US\$100 million each phase]	S	S
Reduce the number of out-of-school children through improved access, quality and efficiency in primary education, especially for the disadvantaged children, in support of EFA Goals	Bangladesh – Reaching Out-of-School Children Project (Grant H-1020) with (SDC) [US\$51 million]	S	S
Improve the quality of secondary education, systematically monitor learning outcomes and increase access and equity in project upazilas	Secondary Education Quality & Access Enhancement Project [US\$130.7 million]	S	S
Other Development Agencies			
Improve quality and increase access to secondary education	Asian Development Bank – Secondary Education Development Program – US\$85 million		
Enhance quality of secondary education by improving teaching quality	ADB - Teaching Quality Improvement in Secondary Education Project (US\$68.9 million)		
Facilitate a more gender sensitive equitable society by promoting girl-friendly secondary schools	EC – Program to Motivate, Train and Employ Female Teachers in Rural Secondary Schools (PROMOTE) – Euro 29.2 million		

Annex 3: Results Framework and Monitoring
BANGLADESH: Higher Education Quality Enhancement Project

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information
<p>Improve the quality and relevance of the teaching and research environment in higher education institutions through encouraging both innovation and accountability within universities and by enhancing the technical and institutional capacity of the higher education sector.</p>	<ol style="list-style-type: none"> 1. Increased level of satisfaction of students and faculty staff regarding the quality of teaching and research environment, and of employers regarding the relevance of teaching and research programs 2. Institutionalization of a competitive funding mechanism for teaching and research through increased allocation in the Medium Term Budgetary Framework (MTBF) 3. Proportion of students and faculty staff with access to advanced internet connectivity. 	<p>The PDO indicators will be used to monitor the overall progress towards the project goals</p> <p>The indicators will be disaggregated by types of institutions (public/private, old/new), areas (general/technical), disciplines, etc.</p> <p>In addition, the efficiency of key project interventions to contribute to the project objectives will be systematically assessed</p>
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
<p>Component 1 – Promoting Academic Innovation</p> <p>The objectives of this component are to: (a) establish enabling conditions to enhance the quality and relevance of teaching, learning and research in universities; and (b) introduce an efficient instrument for the allocation of additional public funds to universities with an emphasis on innovation and accountability</p> <p>Teaching and learning</p> <p>Enhance the professional skills of the academic staff participating in AIF sub-projects in providing innovative and high quality teaching</p> <p>Modernize the undergraduate educational offer by updating the undergraduate and post-graduate qualifications framework, by moving towards flexible and student-centered curricula design</p> <p>Research</p> <p>Enhance the professional skills, capacities among the critical mass of the</p>	<ol style="list-style-type: none"> 1. Proportion of sub-projects implemented according to the plan 2. Proportion of faculty staff participating in AIF sub-projects 3. Proportion of sub-projects implemented according to the plan 	<p>These intermediate outcome indicators will allow to monitor progress in the implementation of the AIF</p> <p>They will be useful in assessing the level of participation in the AIF scheme and the first direct and immediate results of the grants on academic life</p>

Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
academics in conducting advanced fundamental and applied research	4. Increase in doctoral level enrollment	
<p>Improve the institutional research facilities by generating effective access to specialized knowledge and information and by making available the necessary equipments, scientific instrumentation and support services</p> <p>Support the development of high quality Ph.D. programs and national and international inter-department and inter-university cooperation, collaboration and networking</p> <p><i>Institutional management</i></p> <p>Enhance the institutional management skills and capacities in developing academic proposals, managing programs, projects and activities by results and evaluating impact</p> <p>Raise the management capabilities of university and academic staff in raising funds, implementation of innovative teaching and learning, and research projects, and improvement of academic quality through self-assessment</p>	5. Proportion of self-assessments completed by eligible faculties/departments	
<p>Component 2 – Building Institutional Capacity</p> <p>The objective of this component is to enhance the strategic and institutional capacity of UGC and universities</p> <p><i>Sub-Component 2.1 – Improving the Strategic Capacity of UGC</i></p> <p><u>Capacity building for strategic planning of higher education sector.</u></p> <p>Establish capacity in UGC so that this body can carry out strategic planning of the higher education</p>	<p>6. Higher Education Strategy updated and accompanied by a detailed implementation plan</p> <p>7. Number of analytical studies carried out every year to support policy and strategic options</p>	<p>These indicators will allow to follow up how the capacity of both UGC and universities is increased through the interventions of the project</p> <p>With these indicators, it will be possible to judge if UGC’s capacity as a regulatory and strategic institution has started to be upgraded, and if UGC will be ready to formulate long-term, well informed decisions to reform the sector</p>

Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
<p><u>Development of a higher education management information system (HEMIS)</u></p> <p>Enable the collection, entering, preservation, analysis and dissemination of strategic data and information on public and private universities</p> <p><u>Upgrading UGC management capacity.</u></p> <p>The project will support provision of training on management and planning and IT, network, hardware, software, and other relevant facilities required to upgrade the management capacity of UGC based on the needs</p> <p><i>Sub-Component 2.2 – Strengthening the institutional capacity of universities</i></p> <p><u>AIF Promotion</u></p> <p>Increase awareness about AIF</p> <p><u>AIF Training and Workshops</u></p> <p>Provide training to staff of public and private universities on (i) proposal writing; (ii) proposal evaluation; and (iii) sub-project implementation and management</p>	<p>8. HEMIS is in place and operational at UGC and selected pilot universities</p> <p>9. Number of annual statistical reports generated in a timely manner</p> <p>10. Person-months of basic and specialized training provided to UGC officials.</p> <p>11. Proportion of institutes covered under awareness campaign</p> <p>12. Proportion of total proposals preapproved by the UPSCs</p>	
<p>Component 3 - Raising the Connectivity Capacity of the Higher Education Sector</p> <p>The objective of this sub-component is to disenclave Bangladesh universities and to integrate them in the globalized world of knowledge</p>	<p>13. BdREN created</p> <p>14. Digital library created</p> <p>15. Number of universities (public and private) and research institutes connected to BdREN;</p> <p>16. Number of online journal title subscriptions;</p>	<p>In a first phase, these indicators will be used to monitor the progress in setting up the BdREN; then, they will allow to start assessing the extent to which the connection is being used for teaching, learning, research, and academic exchanges</p>

Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
	<p>17. Percentage of students, faculty and researchers with internet & email access on campus;</p> <p>18. Percentage of students, faculty and researchers with access to campus network</p>	
<p>Component 4- Project Management</p> <p>The objective of this component is to ensure proper implementation, management, and monitoring and evaluation of the project</p> <p><i>Sub-component 4.1- Project Management Unit</i></p> <p>Establish a unit for effective management and implementation of the proposed project</p> <p><i>Sub-component 4.2- Monitoring and Evaluation (M&E)</i></p> <p>Monitoring part of the component targets systematic documentation of all project inputs, processes, outputs and outcomes</p> <p>Rigorous evaluation will be carried out to measure the effectiveness of project interventions</p>	<p>19. A fully functional HEQEP Unit is established</p> <p>20. Number of periodic progress reports produced.</p> <p>21. Completion of baseline survey, one follow-up survey at mid-term and one end-line survey</p>	<p>These indicators will be used to ensure that project management and implementation are on track</p>

Arrangements for results monitoring

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		Responsibility for Data Collection
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Instruments	
1. Increased level of satisfaction of students and faculty staff regarding the quality of teaching and research environment, and of employers regarding the relevance of teaching and research programs [%]	0		10			20	A Baseline survey will take place before any project intervention. Satisfaction related data will be collected twice during the project period.	Half yearly self reporting by the PDs of AIF Sub-projects. Sample based satisfaction survey by the HEQEPU staff	HEQEPU and HEMIS
2. Institutionalization of a competitive funding mechanism for teaching and research through an increased allocation in the Medium Term Budgetary Framework (MTBF) [%]	0			10	15	20			Surveys will be carried out by a third party
3. Proportion of students and faculty staff with access to advanced internet connectivity [%]	0	0	0	15	25	50	Monitoring Indicators will be built in the BdREN main software	Bi-annual reporting by the HEQEPU staff responsible for sub-components under components 2 and 3	BdREN Office and UGC
Intermediate Outcome Indicators									
Component 1 – Promoting Academic Innovation									
<i>Teaching and Learning</i>									
1. Proportion of sub-projects implemented according to the plan [%]	0	0	0	75	80	85	Data on intermediate outcomes will be collected by HEQEPU and HEMIS (once it is established) twice every year	Half yearly self reporting by the PDs of AIF Sub-projects And, sample based validation survey by the HEQEPU staff	HEQEPU and HEMIS
2. Proportion of faculty staff participating in AIF sub-projects [%]	0	0	5	5	10	10			
<i>Research</i>									
3. Proportion of sub-projects implemented according to the plan [%]	0	0	0	75	80	85			

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting			Responsibility for Data Collection
		YR1	YR2	YR3	YR4	YR5	Data Collection Frequency and Reports	Data Collection Instruments		
		0	5	5	10	15				
4. Percentage increase in doctoral level enrollment [%] <i>Institutional management</i>	0	5	5	10	15					
5. Proportion of self-assessments completed by eligible universities [%] Component 2 – Building Institutional Capacity	0	0	25	30	40					
<i>Sub-Component 2.1 – Improving the Strategic Capacity of UGC</i>										
6. Higher Education Strategy updated accompanied by a detailed implementation plan	0	0	1							
7. Number of analytical studies carried out	0	0	1	1	1					
8. HEMIS is in place and operational at UGC and selected pilot universities	0	0	1							
9. Number of annual statistical reports generated in timely manner	0	0	0	1	1					
10. Person-months of basic and specialized training provided to UGC officials [p.m.]	0	0	15	25	10					
<i>Sub-Component 2.2 – Strengthening the Institutional Capacity of Universities</i>										
11. Proportion of institutions covered under awareness campaign [%]	0	100	50	100	50	0				
12. Proportion of total proposals preapproved by the UPSCs [%]	0	40	0	60	0	0				

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting			Responsibility for Data Collection
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments		
Component 3 - Raising the Connectivity Capacity of the Higher Education Sector										
13. BdREN created	0	0	0	1				Data on intermediate outcomes will be collected by HEQEPU and HEMIS (once it is established) twice every year	Half yearly progress report by the HEQEPU staff responsible	BdREN Office and UGC
14. Digital library created	0	0	0	1						
15. Number of universities (public and private) and research institutes connected to BdREN	0	0	0	5	30	70				
16. Number of online journal title subscriptions ('000)	8	8	8	9	10	12				
17. Percentage of students, faculty and researchers with internet & email access on campus [%]	5	5	5	15	30	60				
18. Percentage of students, faculty and researchers with access to campus network [%]	0	0	0	15	25	40				
Component 4 – Project Management										
Sub-Component 4.1 – Project Management Unit										
19. A fully functional HEQEP Unit is established	1	1	1	1	1	1				
Sub-Component 4.2 – Monitoring and Evaluation										
20. Number of periodic progress reports produced.	0	1	2	2	2	2				HEQEPU
21. Completion of baseline survey, follow-up survey at mid-term and end-line survey	0	1	1	1	1	1				

Annex 4: Detailed Project Description
BANGLADESH: Higher Education Quality Enhancement Project

I. Project Development Objective

1. The main objective of the project is to improve the quality and relevance of the teaching and research environment in higher education institutions through encouraging both innovation and accountability within universities and by enhancing the technical and institutional capacity of the higher education sector.

II. The Project by Component

Component 1 – Promoting Academic Innovation (Total: US\$50.2 million, IDA US\$48.1 million)

2. The objectives of this component are to: (i) establish enabling conditions to enhance the quality and relevance of teaching, learning and research; and (ii) introduce an efficient instrument for the allocation of public funds with an emphasis on innovation and accountability. In order to reach these objectives, an Academic Innovation Fund (AIF) will be set up. AIF will be used to improve the quality of academic activities and outcomes, to promote and implement departmental or programmatic voluntary self-assessment exercise, as well as to strengthen universities' linkages with national development efforts. It will be also used to encourage cross-disciplinary or inter-institutional academic collaboration and to focus institutional attention to new or emerging issues of policy importance. The AIF will support greater accountability and good governance through enforcement of performance-based project implementation based on the agreed performance indicators and rigorous monitoring. In addition, sanctions will be enforced against non-compliance with the operational procedures and unsatisfactory sub-project implementation.

3. The total amount of the AIF will be made available as a non-reimbursable grant for all eligible public and private universities on a competitive basis. The National University and its affiliated colleges, and the Open University will not be included in the AIF¹³. Participation of universities in this project will be totally voluntary. Principles of the AIF are strict impartiality and transparency with clearly identified selection criteria and procedures and public disclosure of the decisions. These key features are built in the AIF design in order to yield expected results. Once the *sub-projects* are selected, the AIF resources will be utilized according to the approved sub-project proposals which include clearly defined measurable performance indicators and milestones¹⁴. The AIF will be administered based on the agreed procedures which are spelled out in detail in the Operations Manual (OM). Some of the key features of the AIF are summarized here.

4. **AIF windows:** The AIF will allocate its resources through three competitive windows: (1) improvement of teaching and learning; (2) enhancement of research capabilities; and (3) university-wide innovations. Each of the first two windows will comprise two clusters of academic disciplines (i. Humanities and Social Sciences and ii. Sciences and Technologies). The teaching and learning window will also be accessible for self-assessments, to help the universities

¹³ Instead, these two sets of institutions could be the focus of subsequent, specifically dedicated operations.

¹⁴ Only proposals submitted by departments/faculty/centers and endorsed by universities will be considered. Proposals submitted by individual faculty members will not be receivable under the AIF.

and their departments to identify their strengths and weaknesses and to promote a culture of quality enhancement. The third window will cover activities initiated at the university level, in particular investments to ramp up university computerization and university-wide Local Area Network (LAN), which will be generated as a response to the establishment of the Bangladesh National Research and Education Network (BdREN). The window will also cover investments in scientific equipment needed at university level and in library improvements/automation and online journal subscription. It will also allow to reward initiatives aiming to set up partnerships amongst departments and/or universities.

5. Proposals will be invited in two rounds. All the disciplines considered in the two academic windows are summarized in table 1.

Table 1: Clusters of Disciplines under the AIF

Humanities and Social Science	Sciences and Technologies
<ul style="list-style-type: none"> • Arts, Humanities and Social Sciences • Business Studies and Law 	<ul style="list-style-type: none"> • Physical, Biological and Earth Sciences • Engineering and Technology • Medical, Health and Nutritional Sciences • Agriculture (Crops, Livestock, Veterinary, Fisheries, Poultry and Horticulture)

6. **Self – Assessment sub-projects:** The AIF will support proposals for the voluntary design and implementation of self-assessment processes (SA) for the undergraduate and post-graduate programs and at the department level in public universities. The AIF funds will cover: establishment and operation of a SA support unit; training, process facilitation, costs involved in carrying out analysis, external peer reviewers’ visits, and producing the internal, external, and final SA reports. At the end of the SA exercise, the participating program and university will be in possession of an updated program diagnostic and a preliminary improvement plan which will include a set of suggested improvement measures and actions. The overall process will contribute to institutional planning and quality assurance capacity building of participating HEIs.

7. As an incentive for participation, the AIF will also allocate US\$10,000 for partial implementation of the preliminary improvement plan (i.e. procurement of bibliography, computers and ICTs, small instruments and participation in international scientific events) which will arise as a consequence of the SA exercises. In addition, the UGC AIF Secretariat (UGCAIFS), specifically the Program Officer – Teaching and Learning, will provide necessary technical assistance and training to the AIF recipient institutions on the SA processes.

8. **University grouping:** To ensure a level playing field and equity among the universities for AIF competition, universities will be clustered into three groups (group A, B, and C) on the basis of academic capacity to produce modern teaching and learning, high quality research and international quality post-graduate programs. The absolute number of full time academics holding a Ph.D. will be used as a proxy to determine the academic capacity of universities. Funds will be allocated for each group as follows: 60 percent for Group A, 30 percent for Group B, and 10 percent for Group C. University grouping is attached in table 1 of Annex 12. The university grouping will be reviewed prior to the second round.

9. **AIF amount and allocation:** Thirty five percent of the total grant amount will be allocated to the first round and 65 percent to the second round. The breakdown between the three windows will be 40 percent, 40 percent, and 20 percent for the Teaching/Learning, Research and

University-wide windows, respectively. Within each academic window, funds will be notionally distributed amongst groups of disciplines. Indicative allocations by round, window, and disciplines are summarized in tables 2 and 4 below. Sub-projects will be allocated a minimum of US\$30,000 and a maximum of US\$1 million. However, minimum and maximum amounts vary slightly depending on the group, window, and discipline. Within each university grouping, a cap of 30 percent of the total AIF will be applied to the amount of grant that one university can receive. This cap is meant to avoid monopolization by any single more experienced/larger institution or by a small number of such institutions. Summaries of allocations and grant size (minimum and maximum) by university grouping for groups A, B, and C are in tables 2, 3, and 4 of Annex 12, respectively. Similarly, the share of private universities will not exceed 20 percent of the total AIF.

Table 2: Academic Innovation Fund Allocation by Round, Window, and Discipline and Individual Grant Size (minimum and maximum)

Rounds	Windows					
	Window 1: Teaching (40%)			Window 2: Research (40%)		Window 3: Univ-Wide (20%)
	Disciplines			Disciplines		
Round 1 (35%)	Hum & Soc (15%) Min 30,000 Max 150,000	Sc & Tech (75%) Min 100,000 Max 600,000	Self-Assessment (10%) Min 40,000 Max 80,000	Hum & Soc (15%) Min 30,000 Max 150,000	Sc & Tech (85%) Min 100,000 Max 600,000	(100%) Min 100,000 Max 1,000,000
Round 2 (65%)	Hum & Soc (15%) Min 30,000 Max 150,000	Sc & Tech (75%) Min 100,000 Max 600,000	Self-Assessment (10%) Min 40,000 Max 80,000	Hum & Soc (15%) Min 30,000 Max 150,000	Sc & Tech (85%) Min 100,000 Max 600,000	(100%) Min 100,000 Max 1,000,000

10. **Matching funds by private universities:** Funds from the AIF will be allocated as non-reimbursable grants subject to successful implementation based on the performance contract. Private universities will be required to match the AIF grant with a mandatory 20 percent contribution. Through this mechanism, private institutions will demonstrate their commitment to the AIF approach.

11. **Eligibility for receiving grants:** In order to be an eligible recipient of the AIF, the universities should possess:

For All Universities

- i. Commitment to set-up a University AIF Secretariat with qualified manpower for undertaking assessment, procurement, monitoring and evaluation of sub-projects financed under the AIF;
- ii. Minimum annual intake of 100 students in undergraduate academic programs;

For Public Universities

- i. An Act which established the institution as a university;

For Private Universities

- i. A government Charter allowing a private university to function under the Private University Act;
- ii. A permanent campus/establishment owned by the university as stipulated under the

- Private University Act;
- iii. Reserve fund in a scheduled bank as stipulated under the Private University Act;
 - iv. Holding of at least one convocation; and
 - v. Availability of audited financial statement not older than previous two years.

12. **Specific objectives and performance indicators:** Specific objectives, performance indicators and milestones for each of AIF windows are spelled out in the Operation Manual. They will be regularly monitored by the UGC AIF Secretariat.

13. **Eligible expenses and sub-project activities:** A set of expenses for training (e.g. PhD scholarships as part of comprehensive, long term departmental human resource plan), consulting, academic collaboration, procurement of goods and services, and small renovation and refurbishing of lecture/study rooms, laboratories, and workshops will be eligible under the sub-projects which will contribute to the achievement of expected results and measurable impact. Examples of eligible activities which can be funded by AIF are listed in Annex 12. In addition, 2 percent of sub-project cost to meet operational expenses (e.g. temporary renting of space for sub-project activities, repair of sub-project equipment, hiring of labors for shifting of sub-project furniture/equipment/materials etc.) will be made available to the fund recipient entities.

14. Other costs, for instance, salary and allowances for the permanent academic and support staff of the university; recurrent expenditure of the recipient institutions; and costs not related to sub-project activities are considered as non-eligible expenditures and will have to be provided by the beneficiary institutions. Recipient institutions will be responsible for management and regular monitoring of the allocated funds and the funds will be subject to audit under the agreed terms and conditions for accountability purposes.

15. **Calls for proposal:** Calls for proposal will be published in the national dailies and the UGC website by the AIF Secretariat and also on websites of the respective universities. The proposal submitting entities (i.e. universities, institutes, centers, faculties and departments at the universities) will have four weeks to prepare and submit a preliminary proposal (PP) to the University AIF Secretariat (UAIFS)¹⁵. Proposals for window 1 and 2 will be prepared and submitted under: (i) teaching and learning for undergraduate and master's programs; and (ii) research and Ph.D. programs. Self-assessment proposals will be prepared and submitted as complete proposals (CP) under window 1. Complete proposals for university-wide activities will be submitted under Window 3. All proposals will be screened by University Proposal Screening Committees (UPSC) at respective university and evaluated by the Area Review Panels (ARPs). Appropriate forms have been developed and included in the Operational Manual (OM).

16. **Proposal evaluation criteria and processes:** The legitimacy and credibility of the AIF depend heavily on the principles that guide the proposal selection process. Foremost among these are equal opportunity, transparency of process, and technical competence in its evaluations. Once the PPs are submitted to the UAIFS at each university, they will be screened by a UPSC for innovation, impact, viability and consistency with the university's institutional objectives. To favor institutional decision making and planning, the UPSC will prioritize the proposals for submission to the UGCAIFS the combined value of which will not exceed the 30 percent institutional cap. For PPs deemed "satisfactory" or fulfilling basic requirements, the proposal submitting entities will then be requested to prepare CPs. Once the CPs are submitted to the UGCAIFS by institutions, they will be evaluated by six disciplinary ARPs and one separate ARP for self-assessment and university-wide proposals and external peers who are recognized experts

¹⁵ Proposals submitted by individual faculty members will not be accepted

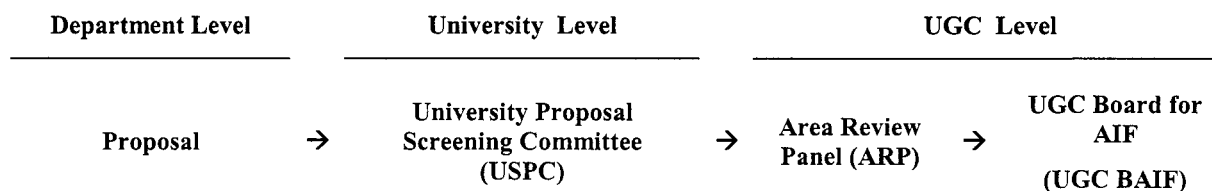
in the respective fields. The evaluation, both at the UPSC and ARPs, will follow well established rules and guidelines and will be based on the evaluation criteria which are summarized in table 3.

Table 3: Screening Criteria for UPSC & Evaluation Criteria for ARPs and UGCBAIF

Screening Criteria for the UPSC	<ul style="list-style-type: none"> • Coherence with AIF and Institutional Objectives • Clarity of the Preliminary Proposal • Quality of drafting of the PP • Benefits and viability
Evaluation Criteria for the ARPs	<ul style="list-style-type: none"> • Clarity of Strategic Analysis and Objectives • Quality and clarity of the milestones and performance indicators • Relevance to the country and benefits • Justification of the budget • Quality of the management plans • Institutional engagement and sub-project management • Clarity of impact analysis • Sustainability
Evaluation Criteria for the UGCBAIF	<ul style="list-style-type: none"> • Relevance to the country's priority areas • Institutional partnership

17. This two-stage screening and evaluation process will be coordinated and managed by the UAIFS and the UGCAIFS. The final selection of complete proposals for AIF support and funding will be sanctioned by the University Grants Commission Board for AIF (UGCBAIF) and published widely. It will take a total of ten months to complete the proposal selection process. The evaluation and selection process is summarized in Figure 1 and the key roles and responsibilities of each unit are summarized in Annex 6. Detailed compositions and terms of reference of each unit are included in the OM.

Figure 1: AIF Proposal Evaluation Process



18. **Performance contract:** Once the selection process is completed, a performance contract will be signed by the three parties involved in each AIF-awarded sub-project: (i) the Sub-project Director; (ii) the sub-project sponsoring/endorsing UAIFS; and (iii) UGC. The performance contract will include rights and responsibilities for both signing parties, possible sanctions for unsatisfactory sub-project implementation, misuse of funds, and non-compliance of procurement and financial management rules; the complete proposal with its annexes, and legal contractual terms (including work, financial and procurement plans). A sample of performance contract is included in the OM.

19. **Duration of AIF sub-projects:** The maximum durations of AIF sub-project implementation are as follow: two years for sub-projects under Windows 1 and 3; and three years for Window 2. If well justified, an extension of up to one year will be given to all sub-projects

under Windows 1 and 3, except for the Self-Assessment sub-projects, provided there is acceptable justification for that, and a minimum of 50 percent execution rate has been reached. UGCBAIF will make decisions on such extensions based on the proposals.

20. **Sanctions:** In the case of non-compliance with the operational procedures, misuse and misappropriation of the AIF by the sub-project director and universities, UGC may take a decision to suspend participation of the offending sub-projects and institutions (if not improved) temporarily. When implementation of sub-projects is found to be falling behind the milestones not caused by external reasons (e.g., DPD, UGC, customs), release of fund installments may be suspended until a new work plan including proposed corrective measures by the project director and endorsed by the university and accepted by UGC.

21. **Procurement and Financial Management:** The implementation will follow current national guidelines and procedures and the World Bank guidelines for procurement and financial management. Detailed guidelines are given in the OM.

22. **Environmental safeguards:** In order to identify potential environmental and safety issues related to the proposed research activities, all the proposals prepared under the science and technology disciplines will be required to submit an Environment and Safety Checklist for Research Proposal (the form is included in the OM). The applicant will fill-up the format, which will be reviewed and signed by the proposed Supervisor and Head of the Department. If the checklist shows potential negative environmental impacts, the applicant will submit a separate sheet for time-bound mitigation measures for it. It is anticipated that the research proposals under Social Science and Humanities disciplines will not have any environment impact and thus the proposals under these disciplines will not be required to submit the checklist unless the review committees request for such checklist.

23. **Monitoring and evaluation:** Regular progress monitoring and evaluation of each sub-project will be carried out to determine whether the sub-projects are implemented as planned and also are progressing towards the achievement of outcomes and impacts which will be measured against the agreed milestones and performance indicators. This is critical as AIF intends to introduce accountability into an institutional and academic culture. The M&E unit under HEQEP will be responsible for designing, organizing and managing the M&E activities of the Project. Respective Project Managers of AIF sub-projects will have to submit half yearly progress reports. MEU will arrange a validation survey for 20 percent of the sub-projects and will match the findings with the self-reported information. Assessment of progress of randomly selected 20 percent of the AIF sub-projects towards their goals will also be arranged by MEU. Experts from relevant fields will be contracted for assessing the progress of the sub-projects.

24. **Operations Manual:** The AIF will be implemented according to an agreed AIF Operations Manual. The OM is an integral part of the HEQEP Project Implementation Manual (PIM), but can be used also as a self-standing document for the staff of the various bodies exclusively in charge of operating the Fund. Agreed amendments to the Manual and the procedures will be made to incorporate necessary adjustments during the project implementation. Changes will be done in consultation with IDA. Significant changes will be made only after the first round of sub-projects.

Table 4: Academic Innovation Fund: Indicative Allocation by Round, Window, and Discipline (US\$)

		Windows												
		Window 1: Teaching-Learning (40%)			Window 2: Research (40%)			Window 3: Univ-Wide (20%)		Windows 1, 2 and 3 (100%)				
		Hum & Soc 15%	Sc & Tech 75%	Self- Assessment 10%	Hum & Soc 15%	Sc & Tech 85%	Total 100%	Univ-Wide 100%	Total 100%	Hum & Soc 24%	Sc & Tech 11,200	Self- Assessment 700	Univ-Wide 3,500	Total 17,500
Round #1 (35%)	Sub-project ave size ('000)	120	450	80	70	300	400	400						
	# of Sub- project	9	12	9	15	20	35	9	9	24	32	9	9	74
	total ('000)	1,050	5,250	700	1,050	5,950	7,000	3,500	3,500	2,100	11,200	700	3,500	17,500
Round #2 (65%)	Sub-project ave size ('000)	120	450	80	70	300	400	400						
	# of Sub- project	16	22	16	28	37	65	16	16	44	59	16	16	135
	total ('000)	1,950	9,750	1,300	1,950	11,050	13,000	6,500	6,500	3,900	20,900	1,300	6,500	32,500
Total	Sub-project ave size ('000)	120	441	80	70	298	200	400	400	88	352	80	400	239
	# of Sub- project	25	34	25	43	57	100	25	25	68	91	25	25	209
	total ('000)	3,000	15,000	2,000	3,000	17,000	20,000	10,000	10,000	6,000	32,000	2,000	10,000	50,000

1) Distribute grand total US\$50 million between round #1 and round #2

2) Maximum allocation to private universities:

3) Distribute rounds between Window 1: Teaching; Window 2: Research; Window 3: University-Wide

4) Distribute between disciplines and self-assessment

5) Funding % in Windows 1, 2&3 can be adjusted according to demand

Range of sub-project size (Rounds 1 and 2):

Teaching: Hum & Soc - US\$30,000 - 150,000

Sc & Tech - US\$100,000 - 600,000

Self-Ass - US\$ 40,000 - 80,000

Research: Hum & Soc - US\$30,000 - 150,000

Sc & Tech - US\$100,000 - 600,000

Univ-Wide: Univ-Wide - US\$100,000 - 1,000,000

Includes WANs, LANs, library and scientific instrumentation

35% and 65%, respectively

20%

40%, 40% and 20%, respectively

15%, 75% and 10%, respectively. Self-Assessment is 4% of total

Component 2 – Building Institutional Capacity (Total: US\$4.4 million; IDA: US\$4.1 million)

25. The objective of this component is to reinforce the strategic and institutional capacity of the sector, both at the central level and at the level of Higher Education Institutions (HEIs). It was agreed that the component will include the following sub-components: (i) Improving the strategic capacity of UGC; and (ii) Strengthening the institutional capacity of the universities.

Sub-Component 2.1 – Improving the Strategic Capacity of UGC

26. This sub-component aims to endow the UGC with the human and information resources needed to steer the higher education sector. To that aim, the project will support the following activities: (i) capacity building for strategic planning of higher education sector; (ii) development of a higher education management information system (HEMIS); and (iii) upgrading of UGC management capacity.

(a) Capacity Building for Strategic Planning

27. UGC, an apex body for higher education institutions in Bangladesh, needs adequate staffing and capacity to carry out strategic planning to address the emerging challenges in tertiary education. Such challenges are multi-dimensional, they cover a wide range of issues, e.g., quality, access, finance, governance, in public-private partnerships. In view of this, the Project will support the establishment of the Strategy & Policy Unit. The unit will be located directly under the UGC Chairman and will be responsible for analyzing the current status of the sector, based on the data collected by the HEMIS unit.¹⁶ The unit will formulate strategies and visions for the sector at the national level. The project will finance hardware and software necessary for the unit to carry out its mandate, and technical assistance and capacity building activities in the areas of strategy formulation, information-based decision-making, institutional performance evaluation. Although initially supported by the project, the unit will remain an integral part of UGC beyond the life of the current project.

(b) Development of a Higher Education Management Information System

28. As an effective tool to support planning, monitoring and evaluation of the performance of the sector, a Higher Education Management Information System (HEMIS) will be established. The HEMIS is a set of computer applications meant to (i) store data related to different managerial and academic aspects of the universities (student admissions, students' performance, curriculum, lectures, alumni, academic staff, students' social affairs, etc.); (ii) support administrative and managerial information flows; and (iii) provide institution management and various academic and non-academic departments with timely and reliable information.

29. University Grants Commission (UGC) now collects information through its various departments using questionnaires in hard copies from the universities. An integrated HEMIS with the universities can provide information instantaneously. UGC will lead the development of HEMIS and will be the “institutional home” for it. A HEMIS unit under UGC will be established to carry out all the tasks related to the system development and day-to-day operations.

¹⁶ Examples of studies to be undertaken/commissioned as a priority could include; (i) labor market situation and future; (ii) opportunities to diversify sources of revenues for HEIs; (iii) quality assurance in National University and its affiliated colleges.

30. **Establishing HEMIS:** HEMIS will be developed in two phases: a national level HEMIS (N-HEMIS) that will be used as a system-wide planning, monitoring and evaluation tool for decision makers at the national level; and a university level HEMIS (U-HEMIS) that will be used as a management tool for university officials at the institution level. The N-HEMIS and the U-HEMIS will be interlinked, and the data from the U-HEMIS will feed into the N-HEMIS. During the project life, the N-HEMIS will be fully implemented and the U-HEMIS will be piloted in a small number of universities and will include a small number of core modules such as information on students, faculty, and financing.

31. **Phase 1: N-HEMIS:** N-HEMIS will be developed in the first phase. It will serve as the central repository and monitoring system. The central database will be located at the UGC building. It will be entirely web-based. The system will be deployed in the form of a secured web site and will be served to the end users of the system through a web server. There will be two major parts of N-HEMIS: *Intranet* and *Extranet*.

32. The *Intranet* will be available only inside UGC premise. UGC management body and officials will be the user of the *Intranet*. A data collection module, internal data entry module, a monitoring module, and an intelligent decision-support system will be embedded in the *Intranet* part. Authenticated UGC users will log in to the *Intranet* by assigned user ID and password. System will check the privilege level of the user and thus will allow a user to the particular modules that he/she is authorized for viewing and manipulation.

33. Though the *Extranet* part of the system will be deployed as a public website, only the authorized persons of the universities i.e. Vice-Chancellor, Deans, Department Heads, Treasurer, Head of Accounts, and procurement officer will have access to it by providing assigned user ID and password. The *Extranet* part will initially be deployed for university data entry through web browser and the entered data will be stored in the central repository i.e. N-HEMIS database. This part may be abolished during the later phase (i.e., implementation of U-HEMIS) by a customized web service that will be deployed at the university level which will feed data periodically or upon request to the N-HEMIS.

34. **Data Collection & Preservation:** The objective of N-HEMIS is to collect, enter, preserve, analyze and disseminate strategic information, such as student background, enrollment and drop out, pass rate and result, recruitment and leave of teachers and officials, qualification of the faculties, research, examinations, infrastructure and financial matters of the public and private universities, so that UGC can evaluate the actual situation of the higher educational institutions and assess the needs on a regular basis. Data for N-HEMIS may be collected through electronic versions of questionnaires to be available on the Internet. The questionnaires will be filled up by the universities and sent to the web server. Data of all universities will be collected through the web server and then stored in the database server that could be accessed by the authorized stakeholders for retrieving relevant information through the Internet.

35. **Validation of Data:** As it will be the universities who will be sending the data, it is necessary to validate the information through physical investigation. HEMIS will undertake a sample survey each year with the same questionnaire that was asked to be filled up by the universities.

36. **Phase 2: Piloting U-HEMIS:** U-HEMIS for each university will be developed in the second phase. Each university will have a separate U-HEMIS unit within the institution. It will contain relevant information of each university. Each U-HEMIS will maintain and host a dedicated webpage. Authorized users of each university and UGC will be able to log in and

access each U-HEMIS through Internet. U-HEMIS will have a local database where the university will insert specific information that will be fed into the N-HEMIS central data repository. U-HEMIS for one public and one private university will be developed simultaneously along with the N-HEMIS as a pilot project in order to observe and assess operational feasibility.

37. U-HEMIS will be deployed in the form of a secured Intranet-based web application and will only be available inside the university premise. Only privileged users will have access to the system. A customized web service will also be deployed which will collect necessary data and send through Internet to the N-HEMIS data repository. A strong encryption mechanism will be embedded in the web service for data security and secured data transmission through Internet. U-HEMIS will have a Data Entry Module, and a University wide Decision Support System that will help universities to monitor their status.

(c) Upgrading UGC Management Capacity

38. UGC was established in 1973 to act as an intermediary between the government (MoE) and the universities and to regulate the affairs of the universities. However, due to the rapid increase in the number of universities (both public and private) in the recent years and inadequate funding and human resources, UGC currently lacks institutional capacity in enforcing academic and financial discipline and cannot perform its oversight responsibility for all public and private universities effectively. The project will support provision of training, after clearance from IDA, and ICT development including hardware, software, connectivity at UGC and other relevant facilities required for upgrading the management capacity of UGC.

Sub-Component 2.2 – Strengthening the Institutional Capacity of Universities

39. The objectives of this sub-component are to: (i) increase awareness about the AIF among the key stakeholders through appropriate media and communication campaigns with specific emphasis on academic innovation and institutional capacity enhancement; and (ii) strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of AIF sub-projects for all AIF eligible public and private universities.

(a) AIF Promotion

40. The objectives are to (i) disseminate the concept of Academic Innovation Fund, and thus build and increase awareness about different aspects of the AIF among all key stakeholders so that they can effectively compete for the fund; (ii) inform the higher education community of Bangladesh about the methods and procedures for accessing AIF, and the responsibilities and accountabilities of the AIF recipient institutions so that, if granted, they can make the best use of it to improve quality of teaching, learning and research. This fund will be the first of its kind in Bangladesh. The voluntary nature of participation in competition, eligibility for the fund, transparent and impartial review and selection process, strict adherence to rules in implementation of sub-projects – all demand thorough knowledge at the recipient end, in this case, public and private universities.

41. The materials for the awareness activities will be prepared by UGC on the basis of the Operations Manual for the AIF with the support of consultants and communication specialists. The awareness programs will follow a cascading arrangement. A pool of academics, selected and thoroughly prepared by UGC will lead the programs initially at the divisional headquarters. The universities in the respective divisions will send the minimum number of representatives to these programs. These representatives in turns will be capable of transmitting the knowledge to the

departments in their respective universities. At each level, the awareness programs will strictly follow the materials prepared by UGC.

42. UGC will follow an awareness and promotion plan, develop communication material and identify the pool of academics immediately after Project Appraisal. While there will be a number of training programs on submission and evaluation of proposals and various aspects of implementation of the sub-projects, a general awareness campaign about the availability of this fund for innovative activities would sensitize the academic community for an early preparation. AIF awareness activities will take place immediately after Project Effectiveness and again prior to the call for the second AIF round.

43. Before each round of call for proposals, seven workshops will be organized, one at UGC and six at divisional headquarters. The participants in the workshops will include the Vice-Chancellors (only at UGC) and academic staff of the public and private universities, Directors of Planning & Development and Directors of Finance of the public universities, concerned officials for finance and accounting/development and/or Registrars of the private universities, selected media professionals, selected students nominated by universities, representatives from civil society and research institutions.

(b) AIF Training and Workshops

44. In order to strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of AIF sub-projects, three sets of training on AIF will be provided by UGC AIF Secretariat for all AIF eligible public and private universities: (i) proposal writing; (ii) proposal evaluation; and (iii) sub-project implementation and management. Draft training materials were prepared based on the Operations Manual by the UGC with the support of Technical Assistance during the project preparation. Training will be provided by the UGC AIF Secretariat with the involvement of appropriate staff of the HEQEPUs (i.e. Procurement, FM and M&E officers for the AIF implementation and management training) and experienced academics. Two rounds of training will be provided on each theme during the project implementation period, and ad hoc training will also be organized for additional needs arising during project implementation, as well as remedial training for those departments and universities whose proposals failed to be approved in the first round. Detailed descriptions of training are in Annex 12.

45. In addition, a separate training will be provided to UGCAIFS on AIF implementation and management. The first training will be provided immediately after the Project Effectiveness. There will be separate workshops for the UGC Board of AIF to familiarize themselves with their roles and responsibilities in management and oversight of AIF, proposal evaluation and decision making.

46. UGC AIF Secretariat will also organize National Workshops on Academic Innovations to raise awareness on the specific topics and to share the best practice of AIF funded activities.

Component 3 - Raising the Connectivity Capacity of the Higher Education Sector (Total: US\$34.0 million; IDA: US\$26.5 million)

47. The objective of this Component is to integrate Bangladesh universities into the globalized world of knowledge. The main activity will be the establishment of a Bangladesh Research and Education Network (BdREN). It will also expand the existing digital library.

(a) Bangladesh Research and Education Network (BdREN)

48. **Overview:** The project will support the creation of the Bangladesh Research and Education Network (BdREN), a high performance Information and Communications Technologies (ICT) network providing connectivity among education and research institutions in both public and private sectors to enable academics, scientists and researchers engaged in higher education and research to communicate with their peers within the country. The network, with its state-of-the-art high performance with access to broadband internet connections at a reasonable price, will support geographically dispersed academics, scientists and researchers with reliable access to high-end computing, simulation tools and datasets.

49. BdREN will support education and facilitate research in, and among universities in Bangladesh. It will also be connected with other regional and trans-continental Research and Education Networks (RENs) and thus link faculty and students of Bangladesh to the global academic community and learning resources¹⁷. It will facilitate international collaborative research and will catalyze innovation in the country. Although it entails considerable initial investment, the BdREN is a cost-efficient alternative to conventional ways to boost connectivity and communication within the academic community. With a proper information campaign regarding the use of the facilities, BdREN is expected to become a catalyst for communication amongst universities. A mechanism to ensure partial cost-recovery by users will be in place before BdREN becomes operational. Once established and operational for universities, it will be possible to extend the BdREN membership and increase its beneficiaries to affiliated colleges at a lesser cost.

Basic Design

50. **Backbone:** The backbone network of the BdREN will be constructed with two components: (i) the Dhaka Backbone (DB); and (ii) the National Backbone (NB). The DB network will use dark fibers to establish 1-10Gbps links. BdREN will obtain single core fiber from the public and private fiber providers in Bangladesh with at least 15 years of uninterrupted right of use. The NB will extend BdREN to the four divisions of Bangladesh respectively at Chittagong, Rajshahi, Sylhet and Khulna. BdREN will rent dark fiber from a national fiber optic provider in order to reach the four divisional centers. A number of districts have public institutions including Noakhali, Potuakhali, Barisal, Rangpur & Dinajpur, where there is currently no dark-fiber reach. The backbone will be extended to these locations using half duplex 45 mbps point-to-point or similar access aggregation radio hops. Between 4 and 6 points of presence (POP) will be established on the DB. A single POP will be established in each of the four divisional headquarters of Chittagong, Rajshahi, Sylhet and Khulna.

51. **Access Loop:** Each member institution will connect to the closest BdREN POP via access loop. Most of the public universities are located at permanent sites. Fiber is the best choice for such institutions. Each such public institution within two kilometers from the BdREN POP will be connected via fiber. However, the public universities which are located further away (thus making fiber expensive), or are not in permanent locations yet- will have the option of connecting via radio links or fiber access loops, provided that the cost of extending fiber beyond 2km is provisioned from other sources. For private universities and research institutions, the access loop fiber installation costs will be borne by the member institutions. BdREN may also rent radio links to those institutions who want to be connected to the backbones via radio links.

¹⁷ Most neighboring countries are now equipped with a National REN. This is in particular the case of India, Pakistan and Sri Lanka.

52. **Equipment:** The network will require two major categories of equipment. Layer-1 (L1) equipment is needed to transmit data over the leased dark fiber between various points. Layer-2/3 (L2/L3) equipment will be used to create an Internet Protocol (IP) network aggregating the Layer-1 paths. The created paths, routing and switching equipment should be able to support 10 Gigabytes (GBps) backbone network capacity over the Dhaka backbone network and 10/100/1000 Megabytes (Mbps) access aggregation capacity over the nationwide backbone. All equipment will be of data carrier grade and will have high degree of redundancy, component hot swapping capability, power-backup and uninterrupted power supply, remote administration, Virtual Private Network (VPN) including Multi Protocol Level Switching (MPLS) VPN and Internet Protocol Version 6 (IPV6) support.

53. **Connection to Global and Regional Education and Research Networks:** BdREN will connect with both commodities Internet and global RENs. Each participating institution on BdREN will be offered up to 100 Mbps network connectivity into BdREN to carry commodity Internet, global REN and inter-institutional traffic. BdREN will connect with the global REN network through the TEIN 3 (Trans-Eurasia Information Network) program of the European Commission. BdREN will also connect with the Bangladesh National Internet Exchange.

54. **Basic Campus Networks (BCN):** Under this component, BCN will also be established in about five public universities that currently have no such infrastructure in place. Other public and private universities that have existing BCN will be able to apply for resources from the AIF in order to upgrade and expand their campus infrastructure.

Phased Implementation

55. BdREN will be implemented under the project over three phases: (i) preparation; (ii) installation; and (iii) operation and transfer of BdREN to a Trust Organization. Transition of BdREN to an independent trust organization will take place toward the end of the project life. At this stage, while the regulatory oversight from UGC and MoE will still be there, there will be greater ownership of the Trust from the community of users with a built-in mechanism for cost-recovery and sustainability. Detailed descriptions of key activities to be undertaken under each phase are in the Project Implementation Manual and a summary is provided in table 5 below.

Table 5: Key BdREN Activities by Phases

PHASE I: PREPARATION	
1. Formation of the organizations and establishment of the BdREN office.	<ol style="list-style-type: none"> 1. Hire Deputy Chief (ICT) to manage the component 2. Hire Technical Supervisory Team (TST) Consultants. The Consultants will design and support the implementation of BdREN. 3. Hire officers for BdREN office. The Chief Executive Officer, Director Operations, 2 Network Engineers, office manager and support staff will be hired; 4. Hire Partnership Organization to peer review system design and specifications and assist with BdREN implementation and capacity building
2. Agreement on the membership, governance, organization frame work and service of BdREN between the Government, UGC, and principal stake holder universities. Determination of membership, subscription, financing, service, and	<ol style="list-style-type: none"> 1. Liaise with the stakeholder community – Universities, Research Institutions, UGC, BTRC, MOE, Operators and fiber optic network providers. 2. Develop and implement the communication strategy for the BdREN component

membership policies and guidelines.	
3. Procurement Process	<ol style="list-style-type: none"> 1. Conduct preliminary System Design and prepare technical specifications for BdREN and BCN. 2. Partnership Organization to review system design and technical specifications 3. Prepare standard bidding documents, in line with World bank guidelines 4. Launch Bidding Process 5. Complete Evaluation of Bids 6. Complete Award of Contract
PHASE-II INSTALLATION	
1. Institutional	<ol style="list-style-type: none"> 1. Hire additional staff for the BdREN office: 2 network engineers, 4 help desk technicians and additional support staff 2. Hire consultants/legal councils to assist in establishment of BdREN into a Trust organization 3. Carry out outreach and capacity building activities for Universities and Research Institutions 4. Prepare BdREN business plan and BdREN strategy
2. Installation	<ol style="list-style-type: none"> 1. Install NOC. 2. Establish Greater Dhaka backbone (GD-backbone) along with greater Dhaka POPs. Completion of fiber and radio access loops connecting all member institutions in the greater Dhaka region to the Backbone 3. Connect the GD-backbone to Internet. Light BdREN and begin test operation. 4. Extend backbone links and POPs to Chittagong, Sylhet, Bogura, and Khulna regions. Complete fiber and radio access loops connecting all member institutions in the greater Bangladesh region to the Backbone. 5. Connect the GD-backbone network to International RENS. 6. Complete installation of basic campus networks for under privileged public universities
3. Commissioning	<ol style="list-style-type: none"> 1. Prepare acceptance testing procedures 2. Conduct operational acceptance test and issue certificates of completion.
PHASE III: TRANSFER OF BDREN TO A TRUST ORGANIZATION	
1. Institutional	<ol style="list-style-type: none"> 1. BdREN transitions from project implementation phase to fully operational phase. 2. Trust established and operational.

(b) Digital Library

56. Some 20 universities and research institutions in Bangladesh are accessing the digital library facilities through Bangladesh INASP-PERI Consortium (BIPC). The consortium has its access limited to a number of journals and publishers. While BIPC provides access, its services leave much room for improvement. Besides, poor connectivity and very limited facilities provided to the teachers and students, particularly in the public universities, are a big constraint in the use of the digital library. With BdREN in place, the potential for accessing the global repository of knowledge will be enormous.

57. In view of this, the project will facilitate access to the global repository of knowledge through subscription to a digital library on behalf of the participating universities. A comprehensive study will be conducted during the first year of project implementation to decide on the modalities of this subscription, integration with BdREN, the nature of participation of public and private universities (including the mechanism to recover the cost), the extent and composition of demand for electronic journals and books to be subscribed, and the state of connectivity of the universities. The study will also assess the usefulness, if any, of this subscription before establishment of BdREN, and the arrangement for the subscription. Based on

the recommendations of the study, it will also be decided if a separate consortium of universities led by UGC for digital library needs to be formed. One designated program officer at HEQEPU, with support from UGC's ICT Unit, will provide technical support to the universities in relation to the digital library. A mechanism allowing cost-recovery from the users will be devised so as to make the scheme sustainable.

Component 4 - Project Management (Total: US\$3.2 million; IDA: US\$2.3 million)

58. The fourth component of the HEQEP is dedicated to the smooth implementation of the activities to be undertaken under the other three components. Its objective is to ensure the proper implementation, management, and monitoring and evaluation of the project, and it is constituted of two sub-components, aiming to reach this objective.

Sub-component 4.1 - Project Management Unit

59. A project management unit, HEQEP Unit (HEQEPU), will be established in order to ensure smooth project implementation. The overall responsibility for the proposed project would lie with the UGC, as the implementing agency, with its line units. The proposed HEQEP Unit will be led by a full time Project Director and staffed with key technical, procurement, and financial management staff. Its main functions will be to plan, manage, implement and coordinate activities under the proposed project. In addition, project management and implementation capacity will be augmented through the use of government and private specialized agencies. Detailed project implementation arrangements are in Annex 6.

Sub-component 4.2- Monitoring and Evaluation

60. Monitoring and Evaluation (M&E) are critical for the project to produce its results as expected. Therefore, this sub-component aims to have built-in mechanisms to ensure that both monitoring and evaluation instruments are in place at the outset of the project.

(a) Monitoring

61. The objective of this activity is to: (i) systematically document all Project inputs, processes, outputs, and outcomes; and (ii) link project interventions with outcomes to indicate the extent of progress and achievement of objectives. A comprehensive and integrated data monitoring system will be in place to ensure that all project inputs, process, outputs and outcomes are tracked from the very beginning. The tools and data sources include: (a) periodic progress reports on the sub-projects under AIF; (b) progress/completion reports on all sub-components under the Institutional Capacity Building Component; (c) periodic report on disbursement, financial management and procurement; (d) data from HEMIS, and (e) results from several rounds of surveys.

62. A small M&E unit (MEU) will be established under HEQEPU which will be headed by a Senior Program Officer. He will be assisted by two program officers. This unit will be responsible for designing, organizing and managing the M&E activities of the project. The monitoring activities of the sub-projects under the AIF (Component 1) will be managed by the MEU with the help of officials of other units under HEQEPU, especially, the AIF Secretariat. Progress reports will be submitted by the respective project directors of the AIF sub-projects twice a year. The MEU will arrange a validation survey for 20 percent of the sub-projects and will match the findings with the self-reported information. Assessment of progress of randomly

selected 20 percent of the AIF sub-projects towards their goals will also be arranged by MEU. Experts from relevant fields will be contracted for assessing the progress of the sub-projects.

63. While designated program officers for different sub-components under Component 2 will be responsible for generating periodic progress reports on the assigned activities, MEU will be responsible for identifying the types of information and analysis required; ensuring timely submission of the periodic progress reports; and publication and preservation of the information and the reports. MEU will be responsible for producing half yearly synthesis report highlighting the progress made as well as outstanding implementation issues.

(b) Evaluation

64. In addition to the evaluation built into the continuing monitoring activities, two specific evaluation mechanisms are planned:

65. **Effectiveness Evaluation** that focuses on the outputs of the interventions will help to better assess the project benefits. It will include a detailed baseline survey (both institutes and individual stakeholders), and follow-up surveys (one before MTR and another just before project completion) to be able to measure the effectiveness and impact of project interventions.

66. **Satisfaction survey** will be carried out upon the students, faculties and employers of the beneficiary institutes/departments in order to assess how the direct beneficiaries value the interventions under AIF. Baseline is planned soon after the initial selection of the AIF first round winners. There will be two follow-ups during the first round. Similar steps will also be followed for the second round. Given the lack of internal capacity to carry out such large surveys, satisfaction surveys may be outsourced.

67. In addition to the satisfaction survey, the impact of the AIF will also be assessed through a comparison of outcomes between the AIF beneficiary population (treatment group) and the population not receiving the benefits of AIF (control group). Even though self-selection (since participation to AIF is voluntary) will not allow a rigorous randomized trial, such a comparison will allow a better grasp on the impact of the scheme.

68. Before the new project modalities are implemented, a comprehensive baseline survey will be carried out. The baseline survey will provide critical information to calibrate the KPIs and assess project effectiveness.

Annex 5: Project Costs
BANGLADESH: Higher Education Quality Enhancement Project

Project Cost By Component and/or Activity	Local US \$million	Foreign US \$million	Total US \$million
1: Promoting Academic Innovation	41.5	8.7	50.2
			-
2: Building Institutional Capacity			
2.1 Strengthening the capacity of UGC	0.7	1.8	2.5
2.2 Strengthening capacity of the Universities	1.8	0.1	1.9
Subtotal (2)	2.5	1.9	4.4
3: Raising the Connectivity Capacity in the Higher Education Sector	19.7	14.3	34.0
4: Project Management and M&E			
4.1 Project Management	1.8	0.3	2.1
4.2 Monitoring and Evaluation	1.1	0.0	1.1
Subtotal (4)	2.9	0.3	3.2
Grand Total	66.6	25.2	91.8

Project Cost By Component and/or Activity	IDA US \$million	GoB ^a US \$million	Total US \$million
1: Promoting Academic Innovation	48.1	2.1	50.2
			-
2: Building Institutional Capacity			
2.1 Strengthening the capacity of UGC	2.2	0.3	2.5
2.2 Strengthening capacity of the Universities	1.9	-	1.9
Subtotal (2)	4.1	0.3	4.4
3: Raising the Connectivity Capacity in the Higher Education Sector	26.5	7.5	34.0
4: Project Management and M&E			
4.1 Project Management	1.3	0.8	2.1
4.2 Monitoring and Evaluation	1.0	0.1	1.1
Subtotal (4)	2.3	0.9	3.2
Grand Total	81.0	10.8	91.8

Note ^a: GoB counterpart funding includes GoB and other participating agencies contribution.

Annex 6: Implementation Arrangements

BANGLADESH: Higher Education Quality Enhancement Project

1. Whilst a Project Steering Committee would provide overall guidance and policy support in respect of the proposed project, the overall responsibility for the proposed project implementation would lie with UGC, as the implementing agency. A Project Implementation Committee, chaired by the UGC Chairman, will provide direct guidance to the HEQEP Unit (HEQEPU) headed by a Project Director in implementation of different components and resolve implementation issues. Coordination of project activities at universities will be carried out through the Vice-Chancellor's office of the universities with support from the UGC/HEQEPU (see Attachment A for Key Roles and Responsibilities).
2. **Inter-Ministerial Project Steering Committee (PSC):** PSC will be chaired by the Secretary, MoE and it will convene meetings at least twice a year. The Project Director would provide technical support to the PSC as member-secretary. The PSC would consist of members not below the rank of Additional Secretary and full Professor.
3. **Project Implementation Committee (PIC):** The PIC will be chaired by the Chairman, UGC and it will convene meetings on quarterly basis. In case of needs, the PIC can convene special meetings on agreed agenda. The Project Director would be the member-secretary of the PIC. The PIC would consist of members from MoE, UGC and representative from participating universities.
4. **HEQEP Unit:** HEQEPU would be established under the overall supervision of the UGC Chairman with a modest number of key technical, procurement, and financial management staff. It would be led by a fulltime Project Director (PD), with appropriate qualifications and experience. The HEQEPU would be mainly responsible for: (a) planning, coordination, implementation and monitoring and evaluation of project activities; (b) procurement and financial management; and (c) reporting on project progress. It will work closely with different divisions and units of UGC, particularly with HEMIS Unit and ICT Unit.
5. The HEQEPU would consist of four functional units, in addition to the Project Director's office which will report directly to the Project Director: (i) the UGC AIF Secretariat (UGCAIFS), headed by an AIF Coordinator, would be responsible for coordinating the implementation of AIF activities (Component 1), AIF training, and AIF promotion; (ii) a Finance Unit, headed by the Finance Director of UGC, supported by a Financial Management Specialist and two full-time accounting officers, would be responsible for Financial Management and reporting; (iii) the Procurement Unit, headed by a Senior Procurement Officer, and supported by two procurement officers, at least one Procurement Specialist (consultant), and a designated procurement officer (focal point) of UGC, would be responsible for project procurement related activities and reporting; and (iv) the M&E unit (MEU), headed by a Senior Program Officer and supported by two program officers, would be responsible for project M&E and reporting. MEU will be assisted by intermittent external technical support for undertaking specific surveys, studies and evaluations (see Attachment B for Job Description for Key Staff of HEQEPU, and Attachment C3 for HEQEPU Organogram).
6. **Universities:** The key requisite for universities to become eligible for participation in AIF would be the formation of a University AIF Secretariat (UAIFS). The UAIFS would be responsible, inter alia, for: (i) providing secretarial services to the university authority and faculty

staff regarding administration of AIF sub-projects; (ii) financial management of the sub-projects implemented in the university; (iii) performance monitoring and evaluation of sub-projects; and (iv) preparation of periodic reports to the UGCAIFS on the physical and financial progress of work, use of allocated funds and its management.

7. ***Project Implementation Manual:*** The project will be implemented according to an agreed Project Implementation Manual (PIM). The PIM will comprise: (i) an AIF Operations Manual; (ii) Implementation Manuals for components two, three and four; (iii) detailed agreed guidelines; (iv) detailed project cost estimates; and (v) a procurement plan. Agreed amendments to these manuals and guidelines will be made periodically to incorporate adjustments during project implementation in consultation with IDA.

8. ***Specific Arrangements for the AIF:*** The highest authority to take decisions on the AIF at the aggregate level will be the UGC Board for the AIF (UGCBAIF). Program officers of the UGC AIF Secretariat (UGCAIFS) will supervise the whole cycle of sub-projects, from the call for proposals to the Monitoring and Evaluation of sub-projects. They will provide support to the various bodies involved in the screening and selection of sub-projects, but will not be involved themselves in the proposal evaluation. The UGCAIFS will be assisted by the Finance and Procurement Units for processing fund release, and for procurement support.

9. The AIF training and AIF promotion activities planned under Strengthening Capacity of the Universities (sub-component 2.2) would be implemented also by the UGCAIFS.

10. At the university level, the Director of Planning and Development (PDP), or his/her equivalent in the private universities, will be the head of the University-AIF Secretariat (UAIFS). A University Project Screening Committee (UPSC) will be set up to initially screen sub-project proposals for conformity with universities' strategy and AIF guidelines. The actual assessment of proposals will be the responsibility of fully independent Area Review Panels (ARPs) assisted by external peer reviewers, which will review the proposals based on a set of clearly pre-defined criteria spelled out in the Operations Manual. Based on the recommendations of the ARPs, the UGCBAIF will make final decisions on the proposals at an aggregate level on the envelopes, but will not review individual proposals again (see Attachment D for Key Roles and Responsibilities for AIF Implementation).

11. ***Specific arrangements for Building Institutional Capacity:*** Activities under the Strengthening Capacity of UGC (sub-component 2.1) will be implemented as follows: (a) a Strategy and Policy Unit (SPU), to be established under the UGC Chairman, headed by a Chief Research Officer, SPU and supported by a Senior Research Officer and two Research Officers, will be responsible for the capacity building of UGC for strategic planning; (b) a HEMIS unit (HEMISU), also to be established under the UGC Chairman and headed by a Chief Research Officer, HEMISU and supported by one system analyst, one program officer/statistician, one database administrator, and one data entry technician, will be responsible for managing and operating HEMIS/U-HEMIS (in addition, provision has been made for outsourcing of development and updating of web-site); and (c) an ICT Unit, headed by Deputy Chief Engineer (ICT) and supported by one IT Engineer BdREN, Program Officer Digital Library, one Programmer and one IT Technician. They will be responsible for upgrading of UGC ICT management capacity, establishment of BdREN, and for managing digital library activities (see Attachments C1 and C2 for the Organograms).

12. ***Specific arrangements for Bangladesh Research and Education Network (BdREN):*** The BdREN component will be implemented over the following three phases: (i) Preparation; (ii) Installation; and (iii) Operation and transfer of BdREN to a Trust Organization.

13. **Preparation phase:** The Deputy Chief Engineer ICT unit in UGC will work with two Technical Supervisory Team (TST) consultants to design the BdREN. The TST will provide hands-on support on all aspects of BdREN implementation until the network is operational and BdREN is transferred into a Trust organization in the operation phase. In year one of project implementation, BdREN office will also be established which would consist of (i) the Chief Executive Officer; (ii) Operations Director; (iii) two network engineers; and (iv) one office manager. Under the Project, an international organization, which will be a university or a REN Institution with substantial experience in designing, implementing, operating and maintaining RENs will be selected as a partner. The main role of the organization will be to provide peer support to BdREN during technical design of the system, operations of BdREN and for capacity building of the BdREN office/ Trust.

14. **Installation phase:** The supply and installation of the BdREN would be done by a contractor which will be responsible for delivering a fully functional and integrated BdREN. Additional staff will be hired for the BdREN office during the installation phase. In addition, two local consultants will be hired to assist in the conversion of the BdREN Office into a Trust organization. These consultants will prepare legal and administrative documents required for the conversion. There is also need to procure the following: (i) long term leases on fiber optic networks; and (ii) bandwidth for the BdREN. The fiber optic network leases could be provided by a number of public and private agencies in Bangladesh, including Power Grid Company of Bangladesh (PGCB), Railways/ Grameen/ Bangladesh Telecommunication Company Ltd. (BTCL) and local Dhaka fiber backbone operators. However, the following issues need to be considered in choosing the provider: (a) the most extensive network in the country; (b) preferably free of cost or at noncommercial rates (cost of operation and maintenance, as opposed to leasing fiber at high commercial rates; and (c) using low cost connectivity leveraging existing network.

15. **Operation phase:** By the fourth year of the project (by end September 2012), BdREN will be established as a Trust organization to operate and maintain the network. A Network Operations Center (NOC) will also be established in order to manage and monitor the BdREN and will provide the following services: (a) responding to network emergencies/ problems tickets; (b) live monitoring of all network hardware events and proactively responding to any hardware or system problems; (c) live monitoring of traffic and proactive trouble shooting; and (d) report preparation for BdREN members and administration. NOC will also host the help desk of BdREN. Any problem will first be directed to the Help Desk. The Help Desk, based on the nature of the problem, will either solve the problem or escalate it to the appropriate engineering unit (see Attachment C4 for BdREN Organogram).

Attachment A: Key Roles and Responsibilities at Central and University Levels

Agencies/Units/ Components	Key Roles and Res possibilities
MoE	<ul style="list-style-type: none"> ● Provides overarching policy and operational guidance for the Project ● Develops a regulatory framework which will enable the Project to achieve its objectives
UGC	<ul style="list-style-type: none"> ● Liaises with MoE on project implementation activities ● Facilitates HEQEPU in its planning and implementation responsibilities ● Provides financial oversight on project implementation ● Makes support available from appropriate UGC line units
HEQEPU	<ul style="list-style-type: none"> ● Sets up guidelines and regulations, and develops operations resource manuals for project implementation ● Plans, manages and implements project activities, and prepares budget estimates/reports ● Disburses approved academic innovation fund to the respected institutions ● Oversees/executes contracts for goods, works and services ● Plans and carries out procurement activities ● Oversees and manages awareness/communications campaigns ● Prepares annual progress report ● Signs Agreements with relevant institutions participating in the project activities ● Carries out day-today monitoring and evaluation of project activities
Building Institutional Capacity (SPU, HEMISU and ICTU)	<ul style="list-style-type: none"> ● Act as focal points for effective implementation and management of respective project activities under Components 2 - Building Institutional Capacity, and Component 3 – Raising the Connectivity Capacity of the HE Sector. ● Provide support to universities ● Maintain appropriate databases for each activity and prepare progress reports on project activities
Monitoring and Evaluation Unit	<ul style="list-style-type: none"> ● Liaises with focal points of implementing entities of all project activities ● Ensures quality and consistency of data collected ● Prepares periodic progress reports taking inputs from relevant sections. ● Produces/oversees production of semi-annual analysis of project progress ● Oversees the work of consultants/firms carrying out impact studies of project effectiveness ● Conducts special ad hoc studies to assess specific issues under the project as needed ● Feeds data/information into annual monitoring and progress reports
Finance & Procurement Units	<ul style="list-style-type: none"> ● Maintain close contact with, UGC, MOE, MOF and organize audits and liaise with accounts department ● Prepare the budget and makes proposals for fund release semi-annually ● Channel funds to recipient entities ● Prepare annual financial reports ● Ensure that institutions adhere to guidelines/criteria regarding utilization of resources and procurement in coordination with UGCAIFS and other relevant agencies ● Keep financial accounts, report on financial progress, ensure internal control and auditing ● Maintain a computerized financial management system ● Contribute to preparation of progress reports, semi-annual and annual plans ● Carry out procurement related activities for the project according to the agreed guidelines (i.e. preparation of procurement plan and bidding documents; review of procurement plans prepared and procurement carried out by universities; and provision of procurement training for universities).
Universities	<ul style="list-style-type: none"> ● Act as focal point for providing institutional data/information, facilitate AIF proposal preparation and implementation, and provide support and oversight for FM and procurement ● Monitor performance of project activities implemented and share periodical progress reports and status reports with HEQEPU/UGCAIF.

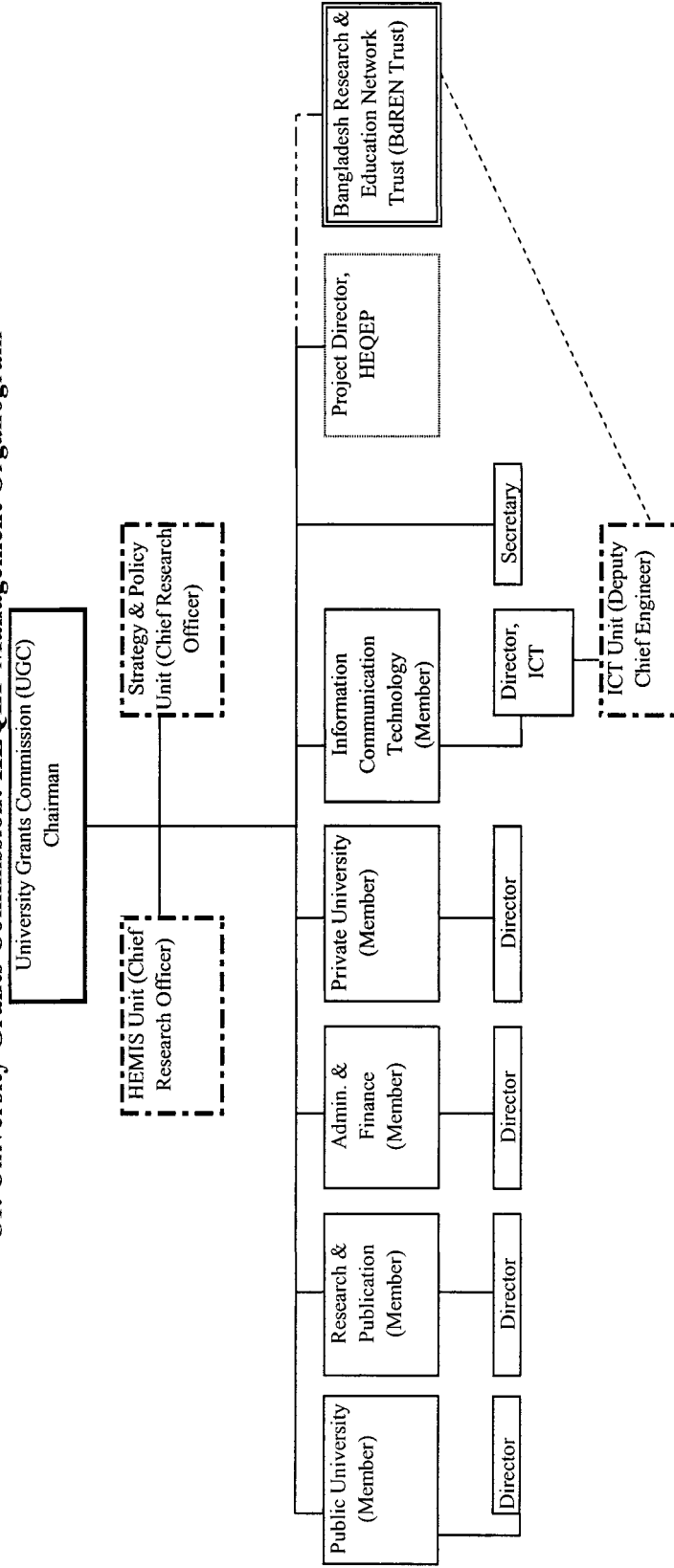
Attachment B: Job Description for Key Staff of HEQEPU

Position	Key tasks	Education/Qualifications	Experience and Skills
Project Director	<ul style="list-style-type: none"> • Provides technical and project management leadership to a team comprising of staff and consultants in carrying out project activities under HEQEP, including procurement and financial management, reporting directly to the Chairman of UGC • Plans, implements, manages, supervises, monitors, and coordinates all HEQEP activities • Coordinates among all HEQEP partner agencies or consultants engaged in HEQEP activities • Be responsible for regular reporting on HEQEP activities to IDA 	<ul style="list-style-type: none"> • Master's Degree, preferably in the field of educational management or related field • Trained in educational development, and project management 	<ul style="list-style-type: none"> • Minimum 10 years of project management and monitoring and evaluation experience, preferably in program management of academic/research funds • Ability to work in foreign aided projects in a team environment • Ability to coordinate with various ministries and agencies • Proficiency in writing and speaking Bangla and English • Basic computer skills (Word, Excel, etc.)
AIF Coordinator, UGCAIFS	<ul style="list-style-type: none"> • Leads and manage all activities under AIF component, AIF Training, and AIF Promotion. • Plans, implements, manages, monitors and evaluates, the AIF activities and coordinates and prepares documents related to AIF according to the Project Implementation Manual and the AIF Operations Manual • Liaises with other relevant staff of HEQEPU on the AIF activities • Liaises with university community on AIF • Reports directly to the Project Director 	<ul style="list-style-type: none"> • Master's Degree, preferably in the field of educational management or related field • Trained in educational development, specifically education quality, policy, administration 	<ul style="list-style-type: none"> • Minimum at least 5 years of project management, and monitoring and evaluation experience, particularly in academic/research funds program • Ability to work in foreign aided projects in a team environment • Ability to coordinate with the universities for subproject implementation • Proficiency in writing and speaking Bangla and English • Basic EMIS/Statistical skills • Basic computer skills (Word, Excel, etc.)
Senior Program Officer, M&E	<ul style="list-style-type: none"> • Leads and manages M&E unit in carrying out M&E activities for HEQEP, reporting directly to the Project Director • Plans, implements, manages, and documents M&E of all project activities under HEQEP and provides feedback to UGC/MOE • Liaises with other relevant staff of HEQEPU on the monitoring and evaluation of project activities 	<ul style="list-style-type: none"> • Masters Degree, preferably in the field of educational management, or related field, with knowledge of economics or statistics • Trained in educational development, and/or M&E 	<ul style="list-style-type: none"> • Minimum at least 7 years of project management, and monitoring and evaluation experience • Ability to work in foreign aided projects in a team environment • Ability to coordinate with various sections within HEQEPU and universities • Proficiency in writing and speaking Bangla and English • Basic EMIS/Statistical skills • Basic computer skills (Word, Excel, etc.)
Senior Procurement officer	<ul style="list-style-type: none"> • Assist Project in carrying out procurement related tasks under HEQEP, including updating the procurement plan, preparing bidding documents and requesting for proposals, short-listing consultants, evaluating bids/proposals, and awarding contracts • Be responsible for procurement monitoring 	<ul style="list-style-type: none"> • At least Bachelor's Degree in any subject, preferably in engineering • Training in procurement management 	<ul style="list-style-type: none"> • Minimum five years' experience in IDA project related procurement • Ability to work in foreign aided projects in a team environment • Proficiency in writing and speaking Bangla and English • Basic EMIS/Statistical skills

Position	Key tasks	Education/Qualifications	Experience and Skills
	<ul style="list-style-type: none"> • Provides necessary support/training to the procurement staff at universities • Reports directly to the Project Director 		<ul style="list-style-type: none"> • Basic computer skills (Word, Excel, etc.)
Financial Management Specialist	<ul style="list-style-type: none"> • Prepares a financial management manual • Assists the PD in preparation of annual budget estimates, revised budget and prepare financial plan • Prepares annual and quarterly disbursement forecasts • Obtains quarterly semi-annual fund release • Reconciles funds transferred and disbursed • Maintains appropriate financial records (registers, books, records, ledgers, etc.) • Ensures internal control through application of appropriate policies and procedures • Ensures early adoption of a Computerized Accounting System (CAS) • Develops a comprehensive Chart of Accounts • Maintains computerized records and inventory on fixed assets • Prepares financial statements and other monthly and quarterly reports • Obtains financial statements from sub-Project Directors • Interfaces with internal auditors and FAPAD • Provides necessary support/training to the FM staff at universities • Reports to directly to Project Director 	<ul style="list-style-type: none"> • A professional qualification (CA/CMA) having Masters Degree in Accounting or in Business Administration / Commerce or equivalent 	<ul style="list-style-type: none"> • Ten years experience in financial management (of which at least three years in a managerial position in any government/semi government organizations), GOB budget, fund release and reporting formalities, World Bank's fund operating conditions & reporting requirements. • Have had hands-on experience in Microsoft or similar computerized Accounting • Proven track record of ability to develop a Chart of Accounts befitting the relevant computerized accounting system and the report • Strong organizational and planning skills with the ability to work independently as a team player and under pressure • Strong interpersonal communicative skills, experience in team leadership and participatory management. • Ability to impart training to the project staff on financial management system
Procurement Specialist	<ul style="list-style-type: none"> • Provides the procurement oversight function under the project in a way that procurement and contract management under project is carried out in an effective and transparent manner in accordance with the Procurement Guidelines of the World Bank and the Government's Public Procurement Act 2006/ Rules 2008(PPA/ PPR), as is applicable. As a member of the PCT, the "Procurement Specialist will specifically be responsible for the following functions: • (i) for large value contracts that are subject to prior review by the World Bank, (i) reviewing the bidding documents, request for proposals, short-list of consultants, (ii) be a formal member in the bid evaluation committee which will be formed as per PPR; • (ii) carrying out the ex-post review of bidding procedures followed in smaller contracts that are not subject to prior review and procured by the implementing agencies; 	<ul style="list-style-type: none"> • Graduate/Post-graduate qualification (at least Bachelors in Engineering or Masters in procurement/ commerce / economics/ finance/ business/ management/ law. 	<ul style="list-style-type: none"> • At least 10 years of experience as Procurement Specialist or have had responsibilities with a substantial content of his / her position in the procurement area (use of internationally accepted contract documents for works, goods and services; sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of Government's procurement Regulations/Act; analytical capability in identifying and resolving procurement issues). • Specialized knowledge of and significant experience in 2-3 substantive areas/aspects of procurement (e.g.

Position	Key tasks	Education/ Qualifications	Experience and Skills
	<ul style="list-style-type: none"> • (iii) reviewing the procurement plan of implementing partner universities and consolidation of the plans and timeliness of procurement processing; • (v) providing necessary oversight and guidance to the procurement of UGC for smaller contracts to ensure that those contracts are implemented in accordance with the agreed procedures; • (vi) providing guidance / training to UGC staff to develop better procurement management capacity and monitor their capacity development program; • (vii) reviewing quarterly report on the compliance of the procurement plans and the procurement risk mitigation plan prepared for the UGC/MOE and the World Bank; • (ix) coordinate tasks with other members in the PCT; and • (x) Any other tasks assigned by PD 		<p>procurement of goods; various forms of construction contracts; selection/ contracting of consultant services; preparation of bidding / contract documents for the international procurement of goods, works, services; public procurement policies; practices).</p> <ul style="list-style-type: none"> • Strong communication skills in presenting, discussing and resolving difficult issues. Ability to work efficiently and effectively in a multidisciplinary team.

Attachment C: Higher Education Quality Enhancement Project
C1. University Grants Commission: HEQEP Management Organogram

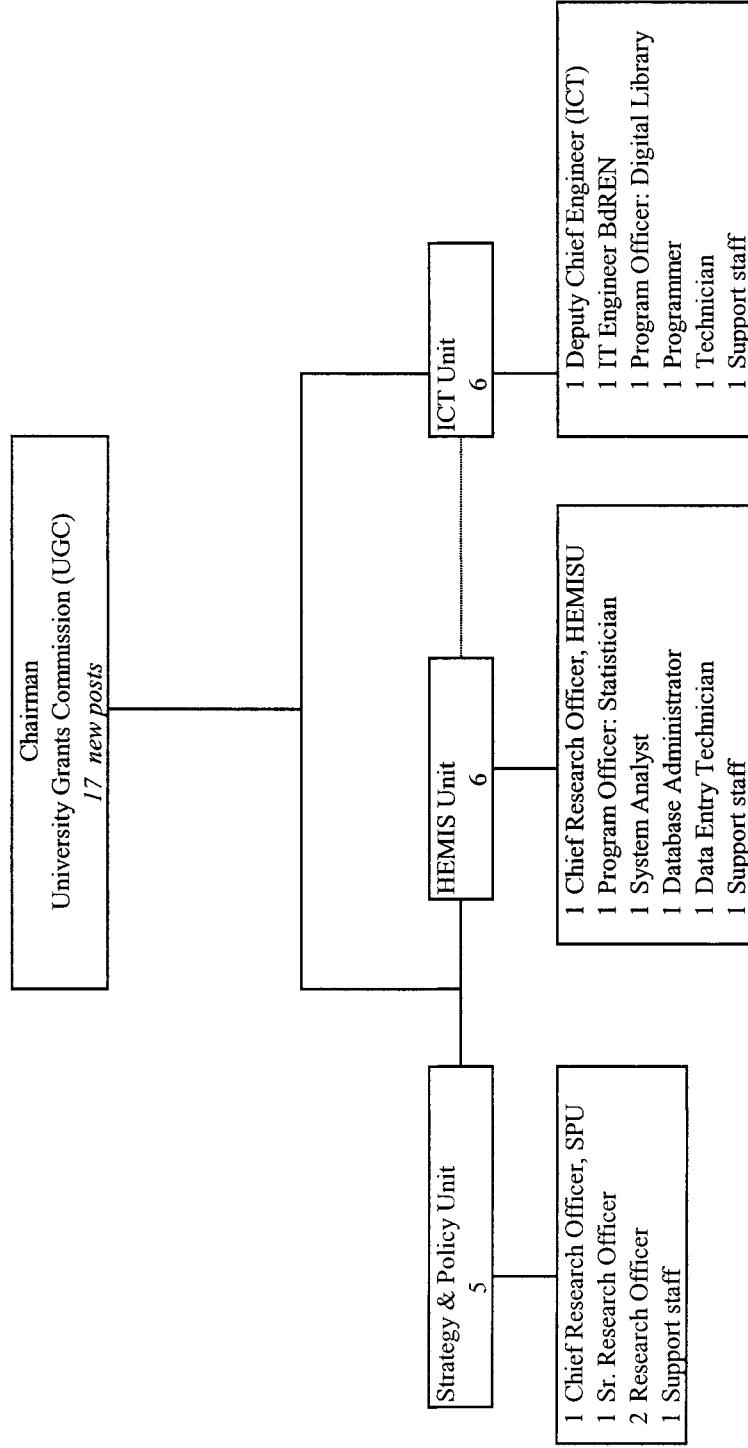


Notes:

- Approved UGC setup
- - - Proposed by HEQEP as regular unit to UGC
- HEQEP Unit - only for project duration
- ==== HEQEP/UGC will establish the independent BdREN Trust

* There will be a working relationship with SPU
 * At the end of project, AIF activities will be internalize by the UGC/MoE

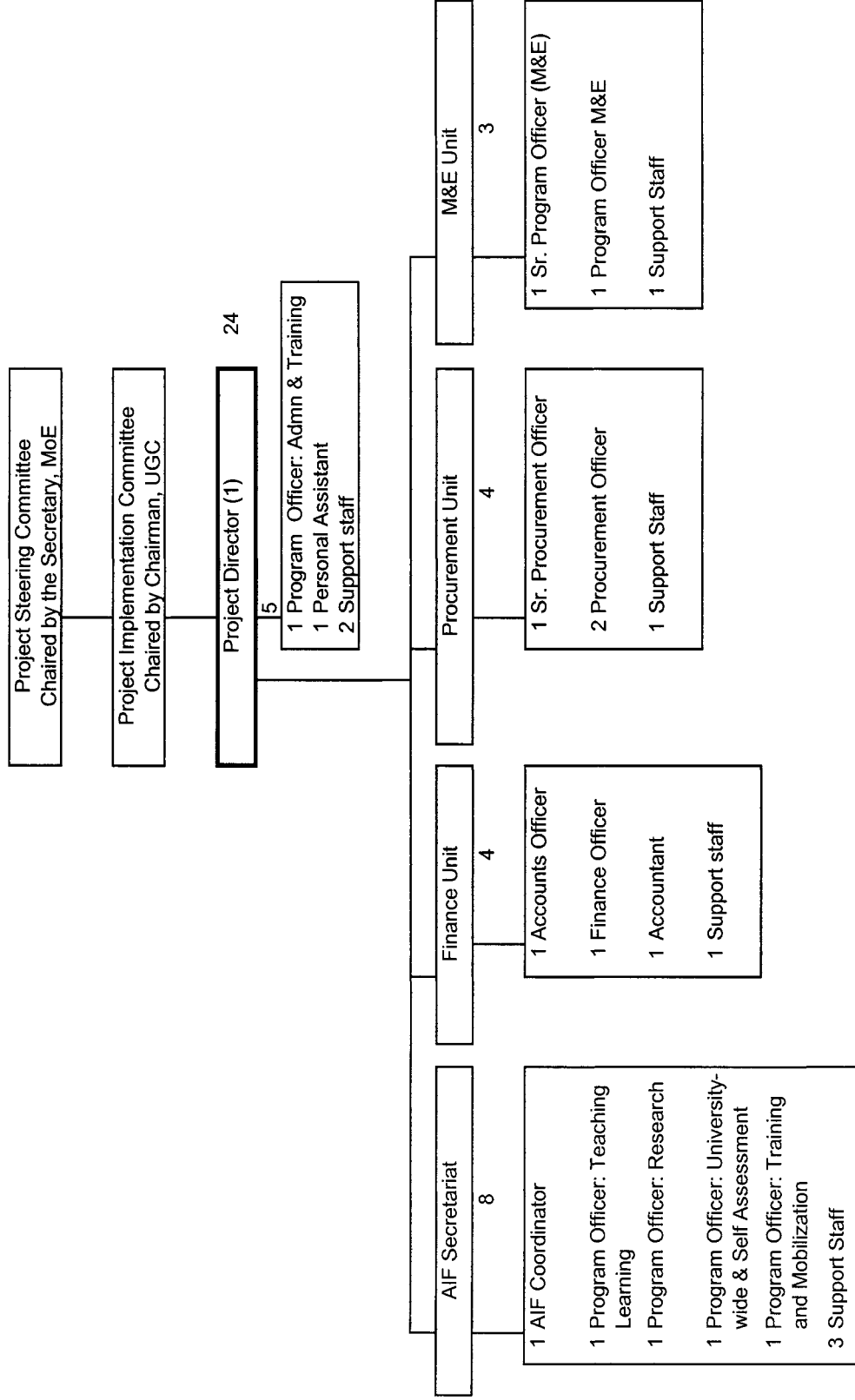
C2. HEQEP Proposed Regular Posts under UGC



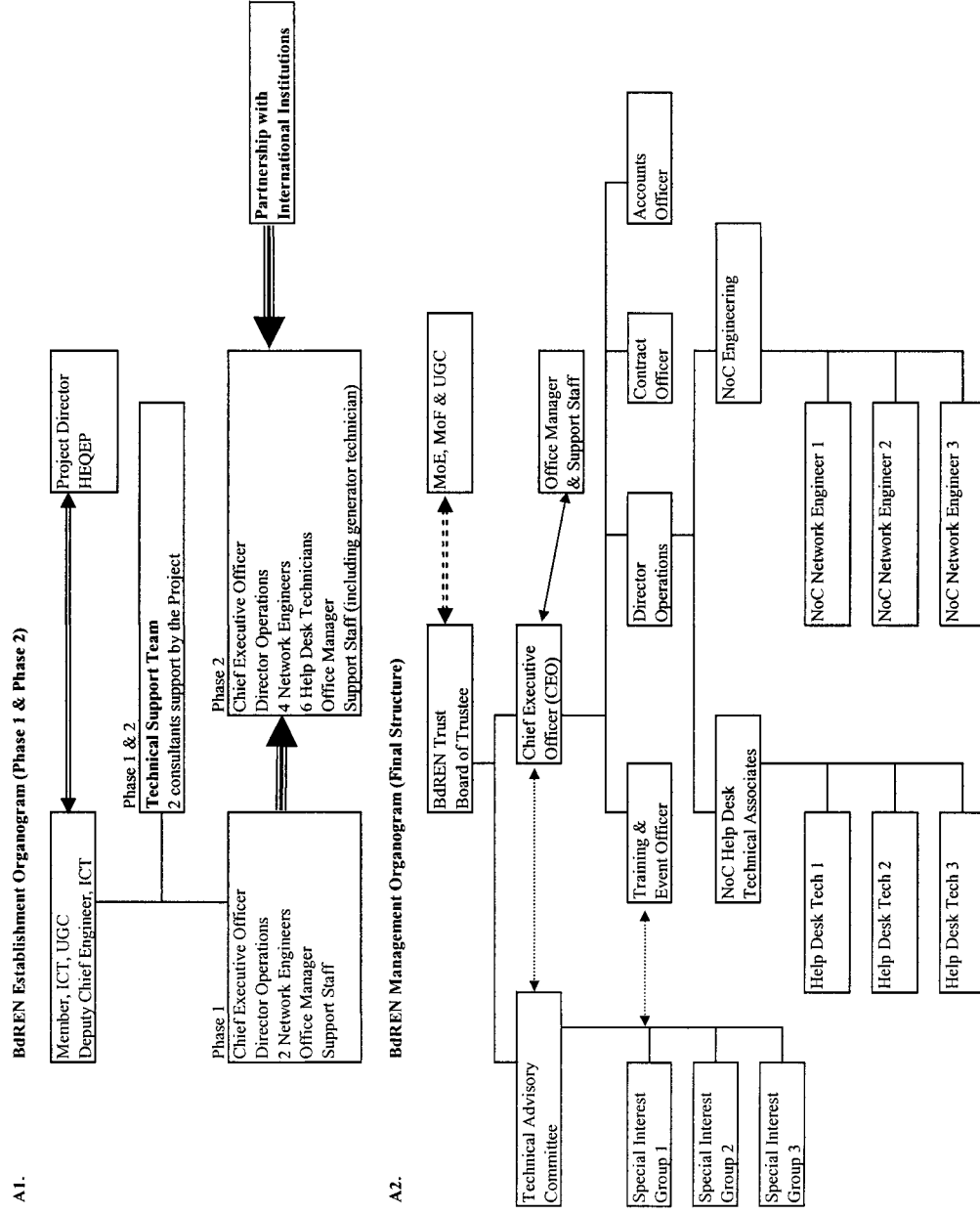
Notes:

- 1 Chief Research Officer post is equivalent to Director of UGC
- 2 Deputy Chief Engineer post is equivalent to Deputy Director of UGC

C3. HEQEP Unit - Management Organogram



C4. BdREN Implementation and Management Organogram



Note: MoE = Ministry of Education, MoF = Ministry of Finance, UGC = University Grants Commission, NoC = Network Operations Center

Preparation and Installation Phases
Final Structure with BdREN Trust

Bangladesh: Higher Education Quality Enhancement Project

C5. Summary of staff positions under HEQEP

Title of Units	Director or equivalent	Additional Director or equivalent	Deputy Director or equivalent	Assistant Director or equivalent	Program Officer or equivalent	System Analyst	IT Engineer	Programmer or equivalent	IT Technician	Support staff	Total
A. Proposed Permanent Position in UGC											
1 Strategic Policy Unit	1			1	2					1	5
2 HEMIS Unit	1				1	1		1		2	6
3 ICT Unit			1		1		1	1	1	1	6
Subtotal of UGC new posts	2	0	1	1	4	1	1	2	1	4	17
B. Proposed Project Positions in HEQEP											
1 Project Director Office	1				1					3	5
2 AIF Secretariat			1		4					3	8
3 Finance Unit					2					2	4
4 Procurement Unit			1		2					1	4
5 M&E Unit			1		1					1	3
Subtotal of Project posts	1	0	3	0	10	0	0	0	0	10	24
Total Project staff	3	0	4	1	14	1	1	2	1	14	41

Attachment D: Key Roles and Responsibilities - AIF Implementation

Unit	Key Roles and Responsibilities
University AIF Secretariat (UAIFS)	<ul style="list-style-type: none"> • Provide secretarial services to the university authority and faculty staff regarding administration of AIF sub-projects • Financial management of the sub-projects implemented in the university • Performance monitoring and evaluation of under-implementation sub-projects • Submit periodic reports in agreed formats to the UGCAIFS and to Director, Planning and Development of UGC on the physical and financial progress of work, use of allocated funds and its management
University Proposal Screening Committee (UPSC)	<ul style="list-style-type: none"> • Examine the PPs for availability of required information/data following the prescribed format • Review the PPs according to the evaluation/selection criteria • Review the CPs on Self-Assessment Exercise according to the evaluation/selection criteria • Select the PPs which have obtained the required marks • Prepare a list of selected preliminary proposals with recommendations mentioning the marks • Send the selected PPs to the UAIFS for further processing
UGC AIF Secretariat (UGCAIFS)	<ul style="list-style-type: none"> • Prepare and publish calls for proposal • Prepare a list of academics and experts for the 7 ARPs and submit it to UGCBAIF for selection • Examine the eligibility of each CP and convey any ineligible CPs to the UGCBAIF • Arrange external evaluator/peer reviewers for the proposals according to the recommendations made by the ARPs • Prepare the score-sheet of each project proposal according to the evaluation done by the ARPs and external peer reviewer • Submit the recommendations of the ARPs together with the score-sheets to the UGCBAIF • Maintain records of AIF resources allocated and disbursed to the universities • Coordinate actions and liaise between the fund recipient universities, UGC, MoE and the World Bank in matters of AIF administration and management • Disseminate information on AIF activities to all concerned agencies, offices and organizations • Provide technical and consulting support to the universities, project directors, ARPs and UGCBAIF • Arrange/organize AIF training • Administration and management of AIF resources
Area Review Panel (ARP)	<ul style="list-style-type: none"> • Evaluate proposals according to the agreed criteria • Select one external peer evaluator for each proposal • Review the substantiation and consistency of external evaluation report together with relevant data, feasibility of the proposal including its budget and management • Recommend for approval or rejection of a proposal stating specifically the evaluation mark and the reasons for doing so • Advise the UGCAIFS and UGCBAIF on matters related to design of the proposals, programming of sub-project proposals, allocation, evaluation and selection criteria, implementation and monitoring
UGC Board for AIF (UGC BAIF)	<ul style="list-style-type: none"> • Ensure that the objectives of the AIF are achieved • Ensure equal opportunities to all participating universities • Ensure transparent evaluation and selection procedure at all levels • Ensure that the proposals conform to the policies and objectives of the tertiary education sector as envisioned by the government • Based on the evaluation of the proposals by the ARPs and their marks, take final decisions at an aggregate level on the awards • Execute the performance contract • Review implementation of sub-projects through regular supervision and field supervision • Dispose appeals according to the agreed procedure • Review the overall priorities, activities, procedures, guidelines and sustainability of the AIF before launching the second round for proposals

Annex 7: Financial Management and Disbursement Arrangement
BANGLADESH: Higher Education Quality Enhancement Project

1. A financial management assessment was carried out to evaluate the overall financial management environment prevailing in the country and within the entities that will implement the project. More specifically it aimed at assessing the financial management risks underlying the project as well as their mitigation measures, the capacities of the main implementing entity and the entities that are expected to execute the sub-projects, the FM systems in place, and to identify the financial management arrangements under the proposed project that would need to be in place to meet the Bank's fiduciary requirements in accordance with its OP/BP 10.02

2. **Country Issues:** Over the last several years, GOB has been addressing key weaknesses in financial management identified in the Country Financial Accountability Assessment (CFAA), through a series of reform programs supported by DFID, the Bank, and a few other development partners. However, due to the fragmented approach to Public Financial Management (PFM) reforms, there has been uneven improvement on the PFM systems across the government agencies and institutions. A joint Bank, DFID, and GOB "Review of Institutional Arrangements for Public Expenditure, Financial Management, and Procurement" completed in June 2005 revealed that Bangladesh's public expenditure institutions need to be significantly strengthened. The review that was carried out under the *Public Expenditure and Financial Accountability (PEFA) Performance Measurement Framework* also confirmed that the links in the public financial accountability chain in Bangladesh continue to be weak as reflected in the lack of accounting information in line ministries, delays in the publication of audit reports, unsatisfactory quality of the external audit function, and ineffective Parliamentary oversight of the whole budgetary process.

3. GOB has taken several steps to improve its public financial management and procurement systems and the overall trajectory of change has also been positive, yet the pace of progress has been slower than anticipated. The recently approved GOB document on *PFM Vision & Medium Term Rolling Action Plan* that develops time-bound reform actions and remedial measures are designed to improve financial management and accountability. Development partners have recently agreed with the Government to provide implementation support to the PFM reforms through a Multi Donor Trust Fund to be administered by the Bank. Efforts are also underway to tailor and apply the PFM measurement framework at the sector level and this would be an opportunity to undertake a diagnostic study of the overall environment in the line ministries. Taking a policy decision on the line ministries' financial management modality including the nature and type of an ideal FM organization has been identified as one of the priority areas in the Government owned second generation reforms that are fully supported by the development partners.

4. To identify the public financial management issues specific to the secondary and higher education sub-sector, a financial management assessment of the education sector was conducted at the beginning of multiple operations of the Education Sector Development Support Credit (ESDSC) program. MOE has been keen to address the issues identified and had agreed with IDA on a medium term Financial Management Improvement Plan (FMIP) comprising actions to: (a) strengthen its Financial Management Unit (FMU); (b) improve reconciliation of accounts; (c) introduce internal audit; (d) respond better to resolution of audit findings; and (e) strengthening follow up on recommendations of the Public Accounts Committee. Significant progress has been made on implementation of these agreed actions over the period of implementation of three

ESDSC operations in the series. The improvements stated above resulted in strengthening MoE's oversight on the financial accountability of its agencies including the University Grants Commission (UGC).

5. Implementing Agency: The UGC, an autonomous body under the MoE established and governed by "The University Grants Commissions of Bangladesh Order 1973", will be the implementing entity for the proposed project. The UGC will implement the Academic Innovation Fund (AIF) component of the project through the public and private universities selected on a competitive basis. The Finance and Accounts division of UGC is accountable to oversee the management of the financial affairs of all Public Universities in Bangladesh in respect of revenue income and expenditure and also to assist the Commission in its financial decision making process. UGC has a structured FM organization through which it is mandated to perform all routine and managerial accounting/financial management functions. Most of the staff has long experience on UGC's current practices with limited vision and motivation for improved performance. No systematic training was provided to staff based on a training needs assessment in order to improve the staff skills. There are no professionally qualified accountant who could lead a team of skilled accountants to meet the challenge of modern accounting and financial management requirements of a regulatory agency dealing with a large number of public and private universities. UGC acquired a limited experience on financial management procedures of the Bank through its implementation of a Bank-financed project namely "Business Management Education and Training Project" during 1986-89.

6. UGC's budget management function is quite comprehensive. It involves identifying the financial needs of all public universities and itself, scrutinizing intensively and critically the revenue budget of the universities, preparation and submission of an annual budget to the MoE and MOF, making budgetary allocations for the universities according to their needs vis-a-vis the availability of funds after approval of annual budget by the Government and verifying the utilization of funds by analyzing the periodical financial reports and statements.

7. UGC follows cash basis of Accounting in line with the Government Financial Rules. Its financial transactions are recorded on the basis of GOB chart of accounts under a manual accounting system. In the absence of a computerized accounting system, timeliness and accuracy of the UGC's financial information are exposed to risk. UGC does not have an appropriate fixed asset recording system. It prepares two sets of financial statements (FS) for transactions under revenue and development budget (projects) respectively and these are not consolidated into one single UGC statement. The Accounts and Finance Division is not involved in the financial management functions of projects under development budget and it does not deal with the related financial information. The Planning and Development Division remains primarily responsible for managing all projects being implemented by UGC including handling financial management aspects such as budgeting, releasing funds from the GOB and claiming reimbursements from the development partners if any, obtaining Authorization for Use of Special Account from the Ministry of Finance (MOF) and preparation and submission of interim and annual financial statements. The periodical accounts are prepared on quarterly basis and submitted to the MoE along with the request for fund release.

8. UGC has put in place a well defined financial delegation of authority, an approved financial policy and an accounting manual with the objective to ensure discipline and management controls on its financial transactions. Since the accounting manual still awaits approval of the MoE, it is yet to be fully operational. UGC preserves its financial records and documentation for 10 Years in compliance to its record maintenance policy. Segregation of duties and checks and balances are reasonably observed in financial management functions. Bank

reconciliation statements that are required to be prepared monthly are met with delays and backlogs. UGC has its own Internal Audit Unit but it does not perform core internal audit functions such as reviewing the internal control arrangements. This unit is mandated to follow up the external audit findings and coordinate the process of settlement of the audit objections. The Local Audit Directorate of the office of the Comptroller and Auditor General (C&AG) is mandated to carry out the annual external audit of the UGC's operations under recurrent budget and the development projects it implements with GOB funding. Donor funded projects approved under Annual Development Plans (ADP) and implemented by UGC are audited by the Foreign Aided Projects Audit Directorate (FAPAD).

9. **Brief Project Description:** The proposed project will comprise four components: (i) promotion of academic innovation in teaching, learning and research through an Academic Innovation Fund (AIF) allocating funds to universities both public and private on a competitive basis; (ii) institutional capacity building at the University Grants Commission (UGC) and the universities; (iii) connectivity capacity building for universities and research centers through the development of the Bangladesh Research and Education Network (BdREN); and (iv) support to the operation of the project implementation unit. FM capacities of the private and public universities that will execute the AIF will be assessed on the basis of a FMQ already designed and FM arrangement for operation of AIF is described in para. 13. Under component 2, the Project will support provision of training on management and planning, IT, network, software, and other relevant facilities required to upgrade the management capacity of UGC that currently needs enhancement of its institutional capacity in order to enforce academic and financial discipline and to perform its oversight responsibility. The project will also strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of sub-projects for AIF eligible public and private universities. The objective of the Component 3 is to disenclave Bangladesh universities and to integrate them in the globalized world of knowledge. The main activity will be the establishment of a Bangladesh Research and Education Network (BdREN). The project will also facilitate access to the global repository of knowledge through subscription to a digital library

10. **FM capacities of the universities:** As part of the financial management assessment for the proposed project, an assessment of a representative sample of public and private universities was undertaken to determine whether the capacities and the systems provide the required financial management environment to use the AIF efficiently. The assessment revealed that the universities have varying degrees of FM capacities from medium to low. A brief account of the financial management capacities of the entities and assessment of the underlying risks are presented below:

11. Almost all the public universities have structured financial management organization headed by a Director, Finance for carrying out their financial management functions in accordance with the respective financial statute and policy. However, most of the universities have inadequacy in staffing in terms of number and competencies. Manually operated government accounting system is followed in all the universities. No one of them prepares bank reconciliation on a monthly basis. Although the Higher Educational Institutions (HEIs) do have their in-house internal audit Units, most of them are engaged only in following up external audit findings and coordinating the process of settlement of the audit objections. The assessment noted that the most compliant of the sample HEIs was the Jahangirnagar University (JU). The University's internal audit department conducts audit to verify the efficacy of internal controls independently and regularly. The Accounts department prepares the annual financial statements and interim financial reports on a timely basis and follows up the external audit issues on a regular basis. Its finance committee exercises oversight on financial management functions.

12. An assessment was undertaken for East West University considering it as the representative sample of the first tier private universities. It was found that it has a structured Financial Management Framework headed by a Controller of Accounts and an internal audit department, which is directly accountable to head of Audit committee (Board President) through the Vice Chancellor. Internal Audit department conducts pre audit for each transaction above BDT. 5000 and looks into the efficacy of the internal control arrangements. Annual budget of the university is prepared on the basis of requirements from each department. EWU has defined financial delegation authority. EWU's accounting system is computerized; it produces financial statements on a timely basis and it is audited by a firm of Chartered Accountant. Although EWU does not have the experience of handling any foreign donor funded project, its governance and internal control structure would facilitate adherence to an appropriate financial management arrangement to support implementation of a grant under AIF. Financial Management environment of EWU is believed to be prevailing in most of the private universities.

13. **Academic Innovation Fund (AIF):** The public and private universities that would meet the eligibility criteria set by the project will be invited to submit proposals under the Academic Innovation Fund. Availability of the audited financial statements not older than previous two years would be the financial management eligibility criteria. The proposals will be evaluated by the UGC following an evaluation criteria embodied in the Operations Manual for the AIF. A Financial Management Questionnaire (FMQ) has been developed, to assess the FM capacities and systems of the universities that would be eligible to submit proposals under the AIF. The FM capability of each university will be assessed on the basis of the responses to the FMQ submitted to the Bank through UGC. The universities that would be assessed as having FM capacities below a benchmark would be required to agree on a Financial Management Action Plan to address the gap, in order for them to be eligible to access funds under the AIF. The implementation of an AIF may rest with the eligible universities themselves or their faculties, departments, centers and institutes. The AIF resources can only be spent according to approved project proposal that would include predefined measurable performance indicators. Each of the recipient institutions will execute a binding agreement with the UGC to implement the activities under the AIF after meeting the guidelines set by the project.

14. **Risk Analysis and Mitigation:** The initial overall FM risk is rated as "High". This is mainly due to: UGC's limited financial management capacity, the FM capacities of the public and private universities that would implement AIF cannot be fully assessed as these are unidentified by project design, flow of funds to dispersed locations and involvement of multiple tiers of GOB authorities in the project implementation process. Considering UGC's management's commitment and upon the agreement reached on identified mitigating measures with time-bound FM Action Plan, the residual risk would be improved as shown in post mitigation rating for a number of risk elements. The residual overall FM risk after mitigation is assessed to be "Substantial." Risk assessment, mitigation measures and determination of residual risks are tabulated below:

Table 1: Financial Management Risk Assessment

Risk	Initial FM Risk Rating	Risk Mitigation	FM Risk after Mitigation	Condition
Inherent Risk				
Country Level	H		H	
PFM institution and system lack capacity for detecting financial irregularities in a timely manner,		Various reforms on country level PFM ongoing and more are planned under donor supported PFM		

Risk	Initial FM Risk Rating	Risk Mitigation	FM Risk after Mitigation	Condition
including taking corrective actions.		Improvement Program but those are unlikely to have any impact in short term		
Entity level	H		H	
Higher Education Quality Enhancement Project (HEQEP), being a new set in handling Bank financed project, may not attract FM staff with relevant qualification and retain staff during implementation period which might severely disrupt FM monitoring, supervision and oversight functions across the various spending Units of operation		<ul style="list-style-type: none"> An accepted FM arrangement clearly defining the role and responsibilities at each level, led by a core team in HEQEP Unit. A need assessment for building institutional capacity of implementing agency and the HEIs. Term appointment of one Financial Management Specialist to provide training at all levels of project implementation and an accounts officer to conduct the day to day accounting function for the duration of the project. 		
Project level	H		S	
FM capacities at all public and private universities that are expected to participate in AIF are inadequate.		Minimum benchmark to comply with the standard practice of Financial management will be established.		
Overall Inherent Risk	H		H	
Control Risk				
Budget				
Non Observance of a structured and participatory budgeting process by UGC might not produce an adequate and realistic budget Lengthy approving tiers- MoF, MoE, Planning Commission, ERD with no service standards would lead to wastage of project input on follow up and might impact on quality of budget prepared hurriedly considering the lead time required in approval process Arbitrary slashing by planning commission/ ERD of genuine budget requirement under Project Aid, despite no constraint in IDA financing	S	<p>The financial Management consultant will prepare the project budget in consultation with the other sections of the HEQEP Unit under a structured budget preparation process.</p> <p>MoE will set a service standard applicable HEIs and different sections/wings of MoE and will explore ways of improving timeliness in scrutinizing and approving process by authorities beyond its boundaries.</p> <p>The MoE approaches ERD to agree that project's proposed allocation in ADP/RADP under PA is not reduced, since IDA funding has no constraint</p>	M	
Accounting	S		S	
Delay in having appropriate FM staff in place and absence of Computerized accounting system (CAS) in UGC might affect the		The project FMS to be recruited will have the requisite skills (TOR agreed) to assist early procurement and implementation of a CAS. MS Excel		

Risk	Initial FM Risk Rating	Risk Mitigation	FM Risk after Mitigation	Condition
<p>accuracy and timeliness of project financial information</p> <p>HEIs do not have well developed accounting and reporting capacities and systems</p>		<p>based system will be used until a computerized system is functional. Technical Assistance for HEIs' will include their financial capacity building focusing on strengthening accounting and financial reporting.</p>		
<p>Internal Control</p> <p>Absence of adequate internal controls, segregation of duties and domination of informal decision making breaking the chain of authorities might affect financial governance of the project.</p> <p>Inadequate controls and lack of transparency on applying evaluation criteria for the Competitive Grants for AIF</p>	H	<p>The FM manual for the project that would be developed would lay down the segregation of duties and define the responsibilities of approval and the steps in processing project's financial transactions.</p> <p>Eligibility Criteria for participation in the AIF and selection process will be defined. The minimum benchmark on FM capacity will be diligently applied based on FMQ responses.</p> <p>Release of funds after full compliance with guidelines for development, submission, review and approval of the Proposals and agreement between UGC and HEIs</p> <p>Random verification of the financial management of the HEIs by independent audit firm during implementation of AIF</p>	H	
<p>Funds Flow</p> <p>Implementation may suffer due to delay in obtaining MoF's authorization to use Designated Account</p> <p>HEQEP's checking and cross checking might affect timely transfer to the HEIs.</p> <p>Possible leakage of funds to be handled by HEIs in using the funds under AIF.</p>	H	<p>FM staff takes due diligence in preparation and timely submission of Authorization Requests, MoE makes quick endorsement and follows up for MoF's accelerated action</p> <p>A defined segregation of responsibilities between HEQEP unit and HEIs would be laid down in the Operational Manual(s). A service standard would be agreed for the various functions of the HEQEP Unit.</p> <p>Adequate payment control will be instituted before funds are transferred. All project expenditures incurred at HEQEP Unit and HEIs will be monitored.</p>	S	
<p>Financial Reporting:</p> <p>Reporting project expenditures by project components as part of IFRs may be constrained until an appropriately programmed computerized system (CAS) is</p>	S	<p>FM staff will use Spread sheet to produce IFRs until a computerized system in place. FM staff will be oriented with and trained on IFRs</p>	M	

Risk	Initial FM Risk Rating	Risk Mitigation	FM Risk after Mitigation	Condition
functional.				
Audit: The audit report might not capture accountability and governance issues adequately. Impact of audit will be compromised due to not disseminating the audit report and not addressing the audit issues. Audits of HEIs are not done on a regular basis.	H	A Statement of Audit Needs (SAN) will be agreed with the C&AG extending the audit focus on testing controls preventing corruption and detecting transactions with corrupt practices Audit reports will be posted in the website to be established for the Project and a Project Audit Committee will review the audit findings and follow up. CAG will carry out financial audit of the project. In addition, the project will institute operational audits throughout the project period	S	
Overall control Risk	H		S	
Overall Initial Project FM Risk	H	Residual Risk	S	
Risk Rating: H (High Risks), S (Substantial Risk), M (Modest Risk)				

15. **The Project Financial Management Arrangement:** The assessed project financial management arrangement, with the implementation of the measures in the agreed action plan will be adequate to meet the project financial management requirements complying with the Bank's OP/BP 10.02. Implementations of longer term actions that were not completed by Appraisal were stipulated as legal covenants. The agreed financial management arrangements are stated below.

16. **Organizational Structure and Staffing:** A HEQEP Unit (HEQEPU) will be established within the UGC to implement the project and also to coordinate, monitor and supervise project implementation activities at participating universities. HEQEPU will be disbursing funds to sub-projects of HEIs and making payment to agreed parties, monitoring fund flow and utilization, consolidating financial information, preparing financial monitoring reports, coordinating audit work and submitting withdrawal application to the Bank. The borrower's ability to successfully implement a project fulfilling the fiduciary requirements of the various stakeholders is largely affected by the adequacy and quality of the financial management system used in the project implementation and continued assignment of FM staff with adequate qualifications and appropriate experience. The financial management assessment of the UGC indicated that its FM system and capacity need to be strengthened to meet the project financial management requirements. As such, to effectively perform the project financial management task that would involve transfer of funds to multiple HEIs, ensuring that funds were used for the intended purpose and arranging replenishment on a timely basis and accounting and timely reporting of receipt and usage of fund, the UGC will appoint a professionally qualified accountant with adequate experience on GOB and IDA financial management procedures as Financial Management Specialist (FMS) in the HEQEPU. The TOR for the FMS was agreed. UGC also identified its two accounting staff that will be fully engaged for this project. These two accounting staff have already received training on IDA Disbursements, and will be trained on FM once the project becomes effective. These identified accounting staff will assist the FMS and be guided by him in

discharging the assigned project financial management functions to be detailed in their job descriptions.

17. **Budgeting:** Project budgets will be prepared by the Project Directors with the assistance of the project FM staff on the basis of the approved procurement and implementation plans. The HEQEP will submit annual original and revised budgets to the planning wing of the MOE for obtaining the Planning Commission's approval under the Annual Development Plan (ADP) and the Revised ADP. The PD will undertake due diligence in preparing realistic budgets to ensure that the project implementation is not hindered by budgetary constraints while taking care that only the resources needed for achievable progress is budgeted. Actual expenditures for the project will be measured against budgets each quarter; budget variances and their rationale will be discussed in the Interim Unaudited Financial Reports (IUFs).

18. **Fund Flow and Disbursement Arrangements:** IDA fund for the project will flow to the UGC mainly through a Convertible Taka Special Account (CONTASA) the Designated Account (DA) for the project, to be opened in a commercial Bank acceptable to IDA. The designated Project Director of HEQEP and in his/ her absence, the deputy, will be the authorized persons for operating the account. Disbursements under the project will be 'Report Based' i.e. on the basis of the fund requirement forecast for the two quarters as will be reflected in the quarterly Interim Unaudited Financial Reports (IUFs). Such expenditures forecasts would be realistic based on the procurement plan, updated implementation plan, and an analysis of payment obligations arising out of contracts having regard to contractual progress milestones. The initial advance to the DA will be the amounts shown as forecast expenditures for the first six months activities of the approved annual work plan from the start up of the projects. The subsequent quarterly disbursements to DAs will match the additional funding requirement based on the realistic forecast of the expenditures anticipated for the six months following the date of IFRs. IFRs must be submitted to the Bank within 45 days from the end of each reporting quarter. Disbursements under the project will also be admissible beyond the DA, through Direct Payment to the beneficiaries and issuance of Special Commitment as and when required. The needs for such disbursements shall be captured in the fund forecasts to be included in the IFRs and funding of DAs will be adjusted accordingly. The minimum application size for direct payment will be agreed with the loan department and will be reflected in the Additional Instructions (Disbursement Letter).

19. The Participating HEIs of AIF will maintain separate operating Accounts (OAs) for each sub projects. HEQEP will be responsible for transferring the initial IDA fund to the operating Accounts of HEIs as 'Imprest' Advances on the basis of their six months estimated expenditure drawn on the approved procurement and work plans. Subsequent funds will be replenished on the basis of SoEs submitted by the HEIs to HEQEP. The private universities will submit the Fund Requests for their sub-projects along with the evidence of depositing their own contribution (20 percent) in the operating account. The SPD (Sub-project Director) in the HEIs will be the authorized persons for utilizing funds in the operating accounts. Advances from Designated Account to the Operating Account will be needed to be accounted for within 90 days. The primary agency that will be directly accountable to IDA in respect of the use of project funds remains the HEQEP.

20. **Project Costs Financing:** The Country Financing Parameter allows Bangladesh to finance 100 percent of the project cost under IDA. Tax rates in Bangladesh not being exorbitant, the IDA financing under various categories would include taxes. The entire financing of the Government of Bangladesh for the project will be used in meeting staff salaries, O&M costs, and costs of BdREN Endowment Fund. The private universities that will participate in AIF will

contribute 20 percent of the approved sub-project costs. To facilitate faster implementation while reducing the transaction costs, no government counterpart funds will be stipulated for the categories to be financed by IDA.

21. The allocation of IDA Credit proceeds in various categories, according to expenditure components, and the share of financing of sub-project grants between the Government and IDA are shown in the following tables:

Table 2: Allocation of IDA Credit Proceeds

Disbursement Categories	Expenditure Components				Total Credit Allocated		% of Expenditures to be financed (Taxes included)
	1	2	3	4	US\$ (m)	SDR (m)	
	(1) Sub-Project Grants	48.1				48.1	
(2) Works		0.2			0.2	0.14	100%
(3) Goods		0.8	7.1	0.4	8.3	5.58	100%
(4) Consulting Services (including Training)		3.1	19.3	2.0	24.4	16.38	100%
Total	48.1	4.1	26.4	2.4	81.0	54.4	

Table 3: Share of Project Financing (Component 1 – Sub-project Grants)

Sl No	Expenditure Component	Total project Cost (US\$ M)	GoB's/Private Universities' Share		IDA's Share Of Financing	
			BDT in Million	US\$ in Million	US\$ in Million	%
1	Promoting Academic Innovation	50.2			48.1	
	Public University		154.9	2.1		
	Private University					100% for public universities and 80% for private universities

22. **Private Universities:** In the case of a private university, such private university, to be eligible for AIF, will provide matching funds of twenty percent of the Sub-project cost.

23. **Disbursement Conditions:** No withdrawal will be made for: (i) payments for grants under Category 1, unless the expenditures are eligible and have been made in conformity with the criteria described in the PIM; and (ii) payments for training costs under Disbursement Category 4, unless the training course is included in the training plan and the list of participants have been cleared by IDA.

24. **Internal Control:** Internal Control comprises the whole system of control, financial and operational, established by management in order to carry out project's activities in an orderly and

efficient manner; ensure adherence to policies and procedures; ensure maintenance of complete and accurate accounting records and safeguard the assets of the project. The regular financial rules, procedures, Project Accounting Manual of the Government and operational manual for the project will be followed on all project activities. Segregation of duties and responsibilities in expenditure management cycle and control functions will be clearly defined.

25. **Internal Audit:** In absence of in-house capacity and focus for Internal Audit in the UGC and the HEIs, the project will undertake operational audit on an annual basis by out sourcing the function to a firm of chartered accountants under agreed TORs. This audit will examine the physical, financial and operational aspects of project implementation and provide timely feedback to project management regarding any control weaknesses or management improvements required. The scope of the operational audit would be comprehensive including review of financial transactions, efficacy of internal control arrangements and evaluation of project performance against the project objectives.

26. **Financial Reporting and Monitoring:** HEQEP Unit would be responsible for consolidating financial information from the participating HEIs, and preparing a Consolidated Project Financial Statements. For preparing quarterly consolidated project interim unaudited financial reports (IUF), HEQEP Unit would develop specific formats to be used by various agencies for their periodic submission to HEQEP Unit.

27. A set of quarterly IUFs are being developed. The IUFs would include Financial Statements (sources and Uses of Funds, Uses of funds by Project component, sub-components and activities, Designated Account reconciliation statement, and expenditures according to disbursement categories). In addition, procurement status report and physical progress report will also be prepared. The IUFs will be submitted to the World Bank Dhaka Office within 45 days after the end of each calendar quarter.

28. HEQEP Unit will develop financial reporting (expenditure statement and bank reconciliation statement) for the sub projects of HEIs. HEQEP Unit will ensure, by complying with Project Accounting Manual that all project financial information is provided periodically to the Chief Accounts Officer of the MoE. This is to ensure that project funds routed through designated account are reflected in the GoB accounts as well in the consolidated financial reports of the Ministry.

29. **Financial Disclosure:** For ensuring transparency on project management, HEQEP will develop a project web site in the first year of the project and ensure that all the relevant financial information, including the AIFs submitted to HEIs, are posted there on a regular basis. For enhancing the impact of Audit, the audit reports and the actions on audit issues should also be disclosed on the web site.

30. **External Audit:** Local and Revenue Audit Directorate of the CA&G office have been conducting the entity and Government funded projects audit of the UGC without providing any opinion on financial statements but reporting on irregularities identified in terms of audit objections on tested transactions. UGC's efforts to resolve such audit objections need to be strengthened. A large numbers of audit objections raised in the past years are still to be resolved. UGC will prepare a specific time bound action plan to resolve the audit issues raised in the objections in last three years which is reflected in the minutes of the negotiations.

31. The external audit of the project will be carried out by the Foreign Aided Project Audit Directorate (FAPAD), the designated unit of the CAG with the mandate to audit all donor

financed projects in Bangladesh. The audit will be carried out within six months of the close of the financial year and a report submitted to the Bank. A Statement of Audit Needs (SAN) will be agreed with the C&AG, extending the audit focuses on testing controls preventing corruption and detecting transactions with corrupt practices. As the annual project financial statements should reflect the transactions and balances associated with special accounts and statements of expenditure, the audit opinion on financial statements will not be required to make specific reference to them. However, SAN will spell out a requirement for the audit to include test checks on SOE and DAs. The following audit report will be monitored in the Audit Report Compliance system (ARCS) – see Table 4 below:

Table 4: Audit Arrangements

Implementing Agency	Audit Type	Auditor	Deadline
HEQEP-UGC	Project's Annual Financial Statements	Foreign Aided project Audit Directorate under C&AG	December 31

32. **Oversight by the Project Audit Committee:** To ensure that the audit reports generated by the Internal Audit and the External Audit of the project are reviewed and to ensure robust follow up of the audit recommendations, a Project Audit Committee will be constituted with the Joint Secretary (Audit), MoE as the Chair and Director, Finance of UGC and the Project Director as the members. The Audit Committee will meet twice a year to review the audit reports and to follow up on audit recommendations. The heads of finance functions of the participating HEIs will also represent their institutions in the PAC. The PAC will function as a sub-committee of the Project Steering Committee and will report to the latter on a periodical basis. The Financing Agreement includes a covenant requiring UGC to form the Audit Committee by June 30, 2009.

33. **Adequacy of Financial Management Arrangement and Action Plan:** Overall financial management arrangements for HEQEP are considered to be adequate, as long as the financial management staffing arrangements and their training are complied with. With appropriate measures taken, as listed in the action plan, the HEQEP will have a financial management system, which will be adequate to comply with Bank's fiduciary requirements. To ensure acceptable FM arrangement at project start up and during the implementation, the following actions have been agreed:

Table 5: Financial Management Action Plan

Action	Responsibility	Completion Date	Condition
Appointment of FMS in HEQEP for the duration of the project	UGC	From the start up of the project	Project Financing Agreement includes provisions for FM staff throughout project implementation
A computerized accounting system with adequate control function built into the system for sub-projects as well as all financial transaction against revenue and capital budget at central level should be introduced	UGC	No later than March 31, 2010	The minutes of negotiations
Provide training to FM staff to run the project's FM activities	For HEQEP staff by IDA For Sub Projects - HEQEP through the Project FMS and	Disbursement training provided. FM training will be provided soon after the credit	

Action	Responsibility	Completion Date	Condition
	consulting services	effectiveness	
Share TOR with IDA and complete the selection of a private auditor for operational review	HEQEPU		
Strengthen FM functions in the Sub projects	HEQEPU		
Preparation and circulation of guidance note outlining FM functions and staff responsibilities in HEQEPU and sub projects	HEQEPU	No later than 30 days after the credit effectiveness	

33. **Supervision Plan:** The initial supervision effort will be intensive and will focus on compliance with all agreed actions, terms, and conditions including Project FM staff being assigned and on board, identifying any FM or disbursement issues in project implementation and agreeing on redressing measures. UGC's readiness for access to Project funds, use of computerized entity accounting system for Project financial management, production of first IFRs on time, and use of internal controls on FM functions will be closely reviewed. In addition, supervision efforts will focus on sampling expenditures below prior-review thresholds, reviewing payment processes against the defined control framework, and monitoring the progress of institutional preparedness and strengthening. The implementation of agreed actions under the FM Action Plan will be closely monitored.

Annex 8: Procurement Arrangements

BANGLADESH: Higher Education Quality Enhancement Project

A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004 (Revised October 2006); and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004 (Revised October 2006), and the provisions stipulated in the Legal Agreement. Within the overall context of Bank Guidelines, local procurement of goods, works, and services (for which the shortlist entirely comprised of national consultants) will follow the Government's Public Procurement Act 2006- PPA (goods: < US\$300,000 per contract, works: < US\$5,000,000 per contract, and consulting services- firms: <US\$200,000 per contract and individual consultant- < US\$50,000 per contract), and in case of any conflicts between the two procedures or ambiguous/ confusing interpretation, the Bank Guidelines shall prevail.

2. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

3. The Project's General Procurement Notice (GPN) was published in the United Nations Development Business (UNDB) on January 11, 2009 identifying large value contracts under this project.

4. **Project Components and Responsibility:** The project in general will be implemented by University Grants Commission (UGC), under the Ministry of Education, except that procurement activities under component 1 of the project will be managed by universities with oversight from UGC. UGC will implement the project through a project management unit (HEQEPU). The HEQEPU will be led by a Project Director (PD) assisted by two deputy PDs. There are four components under this project:

- (1) Promoting Academic Innovation;
- (2) Building Institutional Capacity;
- (3) Raising Connectivity Capacity of the Higher Education Sector; and
- (4) Project Management.

5. The project value is US\$91.8 million; procurement under this project will be of about US\$50 million (IDA US\$48 million) through Academic Innovation Fund (AIF), followed by US\$34 million (IDA US\$26 million) to build IT infrastructure, connectivity and technical assistance for BdREN and building institutional capacity in UGC and different higher education institutes. The project management budget for project tenure is assumed to be US\$3 million (IDA US\$1 million).

6. **Procurement Environment & Reform Actions:** The Country Procurement Assessment Report (CPAR- 2002) identified inadequate public procurement practices as major impediment affecting project implementation in Bangladesh. Following the CPAR recommendations, the

Government implemented a Public Procurement Reform Project (PPRP). Under the reform, the Government with its own resources established a Central Procurement Technical Unit (CPTU) within the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning (MOP); issued Public Procurement Regulations 2003, Public Procurement Act 2006 (PPA), and Public Procurement Rules 2008 (PPR); developed a critical mass of 25 national trainers and trained 1800 staff till September 2007, and established a fully functional procurement website with procurement management information system. The law and the rules contain most of the international good procurement practices.

7. The new rules are being implemented by all public sector entities with varying degrees. Though the landscape of procurement has been reshaped in the last few years due to the procurement reform with harmonized procedures, there are still a number of potential challenges concerning the implementation of Act/Rules in cross-cutting governance, institutional, and implementation issues, including inadequate enforcement of rules, inadequate adherence to the provision of streamlined procurement approval process, delays in contract award for large value contracts, ineffective contract administration, allegations of fraud and corruption, inappropriate application of delegation of authority for decision making and political interference. To sustain the reform effort and address those issues, with Bank's technical assistance, the Government has started a follow-on project, Public Procurement Reform Project II (PPRP II), effective September, 2007 that, among others, focuses largely on implementation and monitoring challenges of PPA/PPR at key sectoral agencies including the introduction of e-procurement and behavioral change/social accountability.

B. Assessment of the agency's capacity to implement procurement

8. **Procurement Capacity and Risk Assessment:** Since March 2008 onwards, UGC has given the responsibilities of preparing procurement arrangements under this project to a qualified engineer recruited a few years back from Local Government Engineering Division (LGED). However, currently there is no particular procurement department or cell, so strengthening UGC is a requirement. Given the country procurement environment and low capacity of universities to conduct procurement in accordance with PPA or the Bank's Guidelines, there is apparently a high risk in allowing universities to procure by itself goods and services with the AIF. Furthermore universities have few staff with expertise in public procurement.

9. Capacity assessment of UGC was carried out in order to evaluate the current capability of the implementing agency and adequacy of systems to be able to administer IDA-financed procurement as well as to assess the risks that may have adverse impact on the ability of UGC to carry out procurement process. Procurement in UGC is mainly conducted by an evaluation committee formed a few years back. Only one UGC member of the evaluation committee has formal training in procurement. Given the overall spectrum covering HEQEP being a green-field project in Bangladesh, procurement to be done by Universities using grants and significant capacity increase is required at UGC and AIF beneficiary (HEI) level, the project is currently rated "high risk" from procurement operation and contract administration viewpoint.

C. Measures for Improvement of Governance in Procurement

10. Several measures have been introduced and agreed with UGC for improving governance in procurement and to minimize procurement risks under the Project, which are:

- (a) assigning focal points in HEQEPU for procurement issues;

- (b) strengthening the procurement unit in UGC with adequate staffing and resources acceptable to IDA for effectively providing assistance to HEQEPU on procurement, including hiring of two local procurement consultants;
- (c) four levels of risk mitigating measures at university level procurement under AIFs;
- (d) establishing system of handling complaints;
- (e) establishing a functional website with procurement related information accessible to public; and
- (f) introducing a procurement risk mitigation plan (PRMP) with a set of performance indicators as described in paras. 19 and 20 below to monitor procurement performance through reports submitted to IDA on a quarterly basis.

11. It is expected that with the implementation of the agreed PRMP, together with the other above-mentioned arrangements, the residual procurement risk will be “medium”. The procurement environment of the project will be regularly monitored through the PRMP, associated performance indicators and frequent post-reviews and the procurement assessment will be updated on an annual basis.

12. **Focal Points for Procurement (PFP):** UGC has assigned one deputy director as procurement focal point and IDA’s counterpart for all procurement issues under this project. This person has completed three-week course on public procurement by CPTU. This arrangement is to ensure accountability within UGC so that procurement processes by UGC or review of HEI’s procurement activities do not get hampered or delayed from HEQEPU’s side. There will be provisions for local and overseas training of the PFP on PPA and IDA’s Guidelines for procurement of goods and works and selection of consultants, preferably in the first year of implementation of the project.

13. **Strengthening Procurement Unit at HEQEPU:** The procurement unit will have the PFP and at least two other officers working full-time as procurement officers (PO). Two procurement consultants will be (PC) hired from the market – one for the whole project duration and another for a period of at two years linking with the AIF tranches.

14. The PFP will undergo advanced international training particularly in procurement of goods and selection of consultants following The Bank’s Guidelines. Furthermore, the POs will undergo three-week training by CPTU whenever there is a congenial opportunity. The PCs will have a systematic training component in their Terms of Reference for building capacity within the universities and they will be obliged to arrange such training before any procurement is undertaken by that university. Furthermore the POs will benefit from the working experience with the PCs through day-to-day work. The procurement unit, besides ensuring the capacity building program of universities by the PCs, may assist universities in preparing procurement plans, bidding documents, advertising for bids, bid evaluation, contracting international and local suppliers as well as for consultancy services, in advertising, shortlist, request for proposals, technical and financial evaluation, negotiating and finalizing contract.

15. For procurement/selection undertaken by UGC under components 2, 3 and 4 of the project, the procurement unit will form the core of the bid/proposal evaluation committee (BEC/PEC) of UGC, with at least two persons from the team, i.e., the PFP, and one PO as mandatory members and one PC would attend all BEC/PEC meetings and provide an oversight report on the overall procurement process. Pursuant to provisions of PPA2006, there will be at least two external members in every BEC/PEC. Besides evaluation of bids and proposals, the procurement unit will also assist the HEQEPU in procurement planning, preparation of bidding documents and bid evaluation reports as well in handling procurement-related complaints.

16. **AIF and Risk Mitigation at University Level:** For procurement under component 1 of the project, the universities will conduct their own procurement under AIF. This requires significant strengthening of universities' capacity in understanding public procurement. The risks associated with allowing universities to conduct procurement will be mitigated in a four tier approach:

- a. A three-day procurement training to university personnel on public procurement will be provided by procurement unit prior to initiating any procurement process by respective university. No university will be allowed to undertake procurement until such capacity building is ensured, satisfactory to UGC and The Bank;
- b. Bid/Proposal Evaluation Committee (BEC/PEC) in the universities shall have at least two members from outside the university;
- c. IDA will prior review first contract by each AIF beneficiary university regardless of value;
- d. On a semi-annual basis, contracts using AIF will be post-reviewed by independent auditors appointed by UGC and the post-review reports will be shared with The Bank for follow-up actions.

17. **System for Handling Complaints:** A credible system of handling complaints would be put in place at UGC and universities. The salient features of the system will be a standard protocol with appropriate triggers for carrying out investigations, taking actions pursuant to PPA against parties involved in inappropriate practices in procurement process, and including submission and disposal of complaints within the timeline stipulated therein. In its premises, UGC and universities will introduce a complaint box and during pre-bid meetings, bidders will be informed of their rights to complain. For ICB/international selection of consultants the complaint redress mechanism under IDA guidelines will apply.

18. **Procurement Website:** The current website maintained by UGC is more based on academic information and links, but this needs to be improved significantly with a view to providing information about the procurement cycle, that is procurement notices, invitation for bids, bid documents and RFPs as issued, latest information on procurement contracts, status of evaluation, award and performance under the contracts. Information relating to bidding and procurement above the specified thresholds, as per PPA, will be published in this website and in that of the CPTU. UGC website would be accessible to all HEIs, bidders, consultants and interested persons equally and free of charge. In case of packages being procured by HEIs, the package/contract-related information need also be accessible to UGC, bidders, consultants etc.

19. **PRMP:** UGC will prepare and share with IDA quarterly reports capturing the following issues provided below (with monitorable indicators) and in Paragraph 20. Some of the following indicators will be put in the sub-project/grant agreement between AIF beneficiary universities and UGC under their grant / sub-project agreements.

Table 1: Indicative Indicators for AIF sub-projects

SN	Indicator Category	Process Indicator	Performance Data
1	Invitation for Tender	Advertisement of tender opportunities in newspaper	1. Percentage of Invitation for Tender (IFT) published in newspaper
		Advertisement of tender opportunities in CPTU's website	2. Percentage of Invitation for Tender (above threshold) advertised in CPTU's website
		Tenders following GoB	3. Percentage of Tenders following GoB procurement

SN	Indicator Category	Process Indicator	Performance Data
		procurement Rules	Rules
		Tender following Development Partner Rules	4. Percentage of Tenders following Development Partner Rules
2	Tender Submission	Multiple locations submission tenders	5. Percentage of tenders allowed to submit in multiple locations
		Tender preparation time in open tendering method	6. Average number of days between publishing of advertisement and tender submission deadline
		Tender time compliance	7. Percentage of tenders having sufficient tender submission time
		Sale of tender documents	8. Average number of tenderers purchased tender documents
		Tenderer Participation	9. Average number of Tenderers submitted tenders
		Tenderer Participation Index	10. Ratio of number of tender submission and number of tender document sold
3	Tender Opening Committee (TOC) and Tender Evaluation Committee (TEC)	Tender Opening Committee formation	11. Percentage of cases TOC included at least ONE member from BEC
		Tender Evaluation Committee formation	12. Percentage of cases TEC formed by Contract Approving Authority
		External member in TEC	13. Percentage of cases TEC included TWO external members outside the procuring entity
4	Tender Evaluation	Tender evaluation time	14. Average number of days between tender opening and completion of evaluation
		Compliance of tender evaluation time	15. Percent of cases tender evaluation has been completed within timeline
		Tender Acceptance	16. Average number of responsive tenders
		Re-tendering	17. Percentage of cases TEC recommended re-tendering
		Tender Cancellation	18. Percentage of cases where tender process cancelled
5	Tender Evaluation Report (TER) approval	Tender Evaluation Approval time	19. Average number of days taken between submission of Tender Evaluation and approval of contract
		Compliance of financial delegation	20. Average number of tenders approved by the proper financial delegated authority
		Submission of evaluation report to appropriate authority	21. Percentage of cases TEC submitted report directly to the contract approving authority
		TER approval compliance	22. Percentage of cases contract award decision made within timeline by Contract Approving Authority
		Additional review of TER	23. Percentage of cases TER reviewed by person/committee other than the Contract Approving Authority
		Higher tier approval	24. Percentage of tenders approved by higher tier than the Contract Approving Authority
6	Contract Award	Time for issuance of NOA to Tenderer	25. Average number of days between final approval and Notification of Award (NOA)
		Tender processing lead time	26. Average number of days between tender opening and Notification of award (NOA)
		Total tender processing time	27. Average number of days between Invitation for Tender (IFT) and Notification of Award
		Publication of award information	28. Percentage of Contract awards published in CPTU's website
		Efficiency in Contract Award	29. Percentage of contracts awarded within initial tender validity period
7	Delivery/ Completion	Delivery time	30. Percentage of Contracts completed/ delivered within the original schedule as mentioned in Contract
		Liquidated damage	31. Percentage of Contracts having liquidated damage imposed for delayed delivery/completion
		Completion rate	32. Percentage of Contracts fully completed and accepted
8	Payment	Payment release compliance	33. Average number of days taken to release payment
		Late payment	34. Percentage of cases (considering each installment as a case) with delayed payment

SN	Indicator Category	Process Indicator	Performance Data
		Interest paid for delayed payment	35. Percentage of Contracts where interest for delayed payments was made
9	Complaints	Tender procedure complaints	36. Percentage of tender procedures with complaints
		Resolution of complaints with award modification	37. Percentage of complaints resulting in modification of award
		Resolution of complaints	38. Percentage of cases complaints have been resolved
		Independent Review Panel	39. Percentage of cases review panel's decision upheld
8	Contract amendments	Contract Amendment/variation	40. Percentage of contract amendments/variations
9.	Contract dispute resolution	Unresolved Disputes	41. Percentage of Contracts with unresolved disputes
10	Procurement Management Capacity*	Procurement training	42. Average number of trained procurement staff in each procuring entity
			43. Percentage of procuring entity which has at least ONE trained/certified procurement staff
			44. Total number of procurement persons in the organization with procurement training.

20. The above indicators will be regularly monitored, the trends will be observed through analytical and statistical methods and remedial measures developed for deployment in the future. In the quarterly reports, for cases involving non-compliance with or deviation from procedures agreed under this project, UGC will also provide short explanation against each data stating the reasons for such anomalies and courses of actions UGC proposes to minimize repetition of the same in future procurement processes. In addition, there are several other steps which UGC has to take under this project and status report of these will also be captured in the PRMP quarterly report. Such steps are also described below:

- 1) **Alert bidders in pre-bid meeting:** UGC and AIF beneficiaries, through a notification, will alert bidders during pre-bid meeting on consequences of corrupt practices (fraud and corruption, collusion, coercion, etc.). The alert message, among others, will include that if bidders are found to have adopted such practices, they would be debarred from subsequent bidding processes in conformity with PPA and IDA Guidelines as appropriate. In addition, in the pre-bid meeting, the bidders will be clarified for preparation of bids correctly.
- 2) **Alert UGC officers/staff:** UGC in reference to the provisions in the PPA and the legal agreement to be signed with IDA, will issue alert letter(s) notifying about the fraud and corruption indicators and the possible consequences of corrupt and similar behavior in procurement practices and actions to be taken against the officials/staff if they get involved in such practices. Moreover, UGC will highlight that in case of non-compliance or material deviation from IDA's Procurement Guidelines, IDA may take remedial actions (i.e., withdrawal of fund, declaration of misprocurement) for concerned contracts.
- 3) **Multiple dropping:** Multiple dropping of bids (bids submitted in more than one location and opened in one location) will not be permissible for any procurement under this project.
- 4) **Bid opening committee (BOC) & Bid evaluation committee (BEC):** A formal structured BOC will be constituted for each contract package, as per the provisions of the PPA. Pursuant to provisions of The Public Procurement Act 2006, the BEC, either at UGS or at university level, will have at least five members with two members from

outside the procuring entity with proven track record of experience in procurement; depending on the type of procurement such members shall be either from public offices and/or from professional bodies/ universities/ beneficiaries. The BOC will include at least one member of the BEC.

- 5) **Bid opening minutes:** During the same day of bid opening, photocopies of the bid opening minutes (BOM) with readout bid prices of participating bidders will be submitted by universities to the HEQEPU for circulation to all concerned. For prior review packages, such BOM will be shared with IDA.
- 6) **Low competition among bidders and high price of bids:** The case(s) of low competition (not solely based on number of bidders) in ICB and NCB cases coupled with high priced bids will be inquired by universities and further reviewed by procurement unit of UGC. The review and decision in this regard would be in the context of qualification criteria, the contract size (too small or too large), location and accessibility of the site, capacity of the contractors, etc. In logical cases HEI/UGC may go for changing the schedule of requirement. The packaging of NCB contracts will be based on HEI's best judgment of capacity of local contractors and slicing of such packages will be done on a case by case basis and shall not be used for lowering the level of contract approving authority.
- 7) **Measures to reduce coercive practices:** Upon receiving allegations of coercive practices resulting in low competition, UGC will look into the matter and take appropriate measures. For prior review contracts, observations of UGC will be shared with IDA, along with the evaluation reports. UGC may seek assistance from law enforcing agencies to provide adequate security for bidders during bid submission. For ICB contracts, provision for bid submission through International/National Courier Services will be allowed & confirmation of the receipt of the bid will be informed to the bidders through e-mail.
- 8) **Rebidding:** In case of re-bidding, UGC will enquire into the matter, record and highlight the grounds of re-bidding (i.e. corruption or similar, high bid prices etc.) along with recommended actions to be taken. For prior review cases, all such detailed reports will be sent to IDA. If in the opinion of IDA, it is determined that collusion, corruption or similar practices have been adopted in the bidding process, UGC may cancel the grant agreement and recover misappropriated/misused amount, if any. Furthermore, pursuant to provisions of the project's financing agreement, IDA may not finance contracts recommended for rebidding and take further remedial measures.
- 9) **Filing and record-keeping:** UGC and HEIs will preserve records and all documents regarding their public procurement in accordance with provisions of the PPA, and these records will be made readily available on request for audit/investigation/review by UGC (for HEI cases) and CPTU/IDA (for UGC and HEIs)
- 10) **Procurement Planning:** Each HEI / AIF beneficiary will submit a procurement plan along with their application for AIF. The consolidated procurement plan of this Project, covering all contracts by beneficiary HEIs of certain award round, will be published in the website of UGC and CPTU, and updated semi-annually.
- 11) **Procurement monitoring information in websites:** UGC, after collecting necessary information from AIF beneficiaries, will furnish to CPTU information of their public

procurement processing activities as per provisions of PPA. In future, UGC may be able to enter all information related to procurement monitoring into the database software (to be established) at UGC and transmit the information to CPTU online or offline, to be incorporated into CPTU's central MIS database. This report will go a long way in periodic assessment of HEIs (public and private) in terms of procurement and contract implementation capacity. Quarterly reports will be generated for monitoring procurement performance of UGC and published in the website of CPTU and/or UGC. These reports will be shared with IDA.

- 12) **Publication of award of contract in websites:** UGC will demand contract award information from universities as soon as award is complete and within two weeks of contract award, publish in its and CPTU's websites the following information: identity of contract package, date of advertisement, number of bids sold, number of submitted bids, number of responsive bids, brief reasons for rejection of bids, name of the winning bidder and the price it offered, date of notification of award, date of contract signing, proposed completion date of contract as well as brief description of the contract awarded. For contracts following International Competitive Bidding (ICB) procedures, UGC shall publish notice of award of such contracts in UNDB Online and Development Gateway Market (dgMarket) in accordance with the provisions of IDA Guidelines.
 - 13) **Post procurement audit (review):** As per the provision of the PPA, UGC will carry out semi-annual post procurement audit (review) based on sample contracts by hiring chartered accounting firm (with international affiliation), share the findings of the report with CPTU and IDA, and will initiate actions/ steps for improving procurement practices, as appropriate.
 - 14) **Special training course:** Prior to implementation of the project, UGC through the procurement unit of HEQEPU will arrange a three-day customized training course, covering IDA Guidelines and the PPA. All officials handling procurement or holding membership of BECs are required to participate in this training. No staff should be allowed to handle procurement without appropriate procurement training. Furthermore, the PCs will provide periodic training to AIF beneficiaries/HEIs' procurement/purchase officers, who will be designated up-front during submission of application.
 - 15) **E-Procurement:** In order to minimize collusive and coercive bidding practices, with a medium term perspective, UGC will take initiative to introduce e- procurement in their system under the overall framework of CPTU's central portal. This may be feasible considering the IT infrastructure that is going to be institutionally developed for UGC and Universities.
 - 16) **NCB conditions to be added:** i) Post bidding negotiations shall not be allowed; ii) Rebidding will not be carried out without prior approval of IDA (for prior-review contracts) or UGC (for post-review contracts).
21. **Other Actions.** Other actions taken or to be taken during implementation to improve the procurement governance are:
- (a) Procurement Unit core members and other previously trained officers to work in this project will attend refresher courses organized by CPTU/IMED; and

- (b) UGC, by negotiations of this project, will submit a training plan for all concerned procurement staff in UGC/HEQEPU that will undergo procurement training (three-week and short courses) during the tenure of the project.
- (c) In addition to the local training under PPRP II, the PD and the PFP may take overseas procurement training.

22. **The overall project risk for procurement is High:** With the above arrangements, the procurement under the project is likely to be effective and transparent resulting in smooth implementation of the project leading to achievement of the project development objectives, and under current assessment residual risk related to procurement is assessed as medium. However, procurement process and implementation of the contracts would be reviewed every six months by the HEQEPU in collaboration with IDA and adjustments would be made, and corrective actions would be taken if necessary.

23. The procurement procedures and SBDs to be used for each procurement method, as well as model contracts for works and goods procured, are presented below:

D. Procurement Arrangements:

24. Overall procurement arrangements with tentative amounts are given in Table 2.

Procurement of Works:

25. Very little amount of civil works are envisaged under this project. The following procurement methods can be used just in case AIFs are used for eligible purposes such as renovation/refurbishing of lecture/study rooms, laboratories etc.:

- (a) **International Competitive Bidding (ICB):** ICB will be used for contracts estimated to cost equal to or more than US\$5.0 million equivalent per contract.
- (b) **National Competitive Bidding (NCB):** Civil works contracts estimated to cost less than US\$5.0 million equivalent per contract may be procured using NCB in accordance with provisions of the PPA.
- (c) **National Shopping (NS):** Small works may be procured in accordance with national shopping (Request for Quotations) provisions of PPA.

Procurement of Goods:

26. Generally goods will be procured using ICB, followed by NCB and national shopping for small valued contracts. Direct contracting will be used for specialized items of low value / proprietary nature / specialization, with IDA's prior agreement. This is applicable for both AIF beneficiaries and UGC.

- (a) **ICB:** Goods and equipment contracts estimated to cost US\$300,000 equivalent or more per contract will be procured using ICB. This includes procurement of the whole system of BdREN.
- (b) **NCB:** Goods and equipment contracts estimated to cost less than US\$300,000 equivalent per contract may be procured using NCB following provisions of the PPA. This includes vehicles, computers, office equipment etc.

- (c) **National Shopping (NS):** Small goods and equipment contracts may be procured in accordance with provisions of national shopping (Request for Quotations) under PPA.
- (d) **Direct Contracting (DC):** Under this project, computer software, books journals and training materials with individual contract costing less than thresholds mentioned in the PPA and associated PPR, can be procured following DC procedures in accordance with PPA with IDA's prior agreement,.

Consultants' Services and Training

27. Major consultancy assignments relate to monitoring and evaluation (M&E), procurement, financial management, design and implementation monitoring of BdREN, communication, development of HEMIS etc. Furthermore, there will be consultants to provide technical assistance to UGC for project implementation and monitoring. Short lists of consultants for services estimated to cost less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines, with selection following the PPA. The methods of procurement that can be used in this project are as follows:

- (a) **Quality- and Cost- Based Selection / Quality-Based Selection (QCBS/QBS):** Consulting services through firms estimated to cost US\$200,000 equivalent or more per contract will be selected following QCBS/QBS in accordance with IDA's Consultant Guidelines. Major assignments include design and implementation monitoring of BdREN.
- (b) **QCBS / Fixed Budget Selection (FBS):** Services through firms estimated to cost less than US\$200,000 equivalent per contract shall follow the QCBS/ FBS method in accordance with PPA. The consultant required for HEMIS may follow this procedure.
- (c) **Selection Based on Consultant Qualification (CQ) / Least Cost Selection (LCS):** Services through firms estimated to cost less than US\$100,000 equivalent per contract may be procured following CQ or LCS in accordance with the PPA. .
- (d) **Single-Source Selection (SSS):** Specific consultants' services through firms, estimated to cost US\$50,000 or more and satisfying Consultants' Guidelines (paragraph 3.9 to 3.13) with IDA's prior agreement may be procured following SSS under Consultant Guidelines. All other specific contracts costing less than US\$50,000 per contract, with IDA's prior agreement, may be procured following the PPA. This includes staff training and capacity development in project management and implementation.
- (e) **Individual Consultants (IC):** Services for assignments, estimated to cost US\$50,000 or more, for which teams of personnel are not required and the experience and qualifications of the individual are the paramount requirement, will be procured through individuals in accordance with Section V of the Consultants Guidelines. All other individual consultants may be selected following provisions of the PPA. Individuals will be selected on the basis of their qualifications for the assignment. Individual experts on procurement, financial management, communication, digital

library specialist etc. M&E as well as for technical assistance to UGC will be selected following this method.

Operating Costs

28. The operating costs will include operations and maintenance of equipment and vehicles, hiring of vehicles, office rent, costs of consumables, fuel, office utilities and supplies, bank charges, and advertising expenses but excluding any salaries and allowances of civil servants.

E. Procurement Plan

29. A draft procurement plan covering the first eighteen months of project implementation has been prepared which provides the basis for the procurement methods. This plan will be agreed between the Borrower and the Project Team prior to negotiations. It will also be available in the project's database and in IDA's external website for this project. The Procurement Plan will be updated in agreement with UGC semi-annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Use of Standard Bidding and Contract Documents

30. For ICB procurement of goods and works, the use of IDA's Standard Bidding Documents (SBD) is mandatory. For NCB procurement, UGC may use the Government's Standard Bidding Documents in form acceptable to the WB. For selection of international consulting firms, the WB's Standard Request for Proposals (RFP), including standard contract form will be used; for local consultants Government's procedure laid out in the PPA will apply including its documentation. Depending on the type of procurement, the WB's or Government's Standard Bid/Proposal Evaluation Form will be followed for submission of evaluation reports.

Prior Review Thresholds

31. **Goods and Works:** During the initial 18 months of the project, IDA will carry out prior review of the following contracts: (i) for goods- first contract using NCB, and thereafter contracts estimated to cost US\$300,000 equivalent or more, irrespective of the procedures; (ii) for works- first package/contract using NCB, and thereafter all contracts estimated to cost US\$500,000 equivalent or more, irrespective of the procedures; and (iii) all contracts for goods and works using direct contracting. After 18 months, the above thresholds will be reviewed/defined/redefined in the revised procurement plan, if necessary but subject to the prior review and "no objection".

32. **Consultants Services:** IDA's prior review will be required for consultants' services contracts estimated to cost US\$100,000 equivalent or more for firms and US\$50,000 equivalent or more for individuals. All single-source contracts will be subject to prior review by and agreement with IDA. All Terms of References of the consultants are subject to the IDA's prior review.

Table 2: Thresholds for Procurement Methods and Prior Review a/

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
Works	>= US\$5,000,000	ICB	All contracts.
	<US\$5,000,000	NCB	First contract regardless of value in NCB by each university and thereafter, all contracts valued US\$500,000 or more

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
		NS DC	Post review All contracts
Goods	>=US\$300,000	ICB	All contracts
	<US\$300,000	NCB NS DC	First contract regardless of value in NCB by each university and thereafter, all contracts valued US\$300,000 or more. Post review All contracts
Services	>=US\$200,000	QCBS/ QBS	All contracts.
	< US\$200,000	QCBS/FBS	Contracts equivalent to or more than US\$ 100,000
	<US\$100,000	CQ/LCS	Post review
	>=US\$50,000	IC- Qualifications (Section V of the Consultant Guidelines)	All contracts
	<US\$50,000	IC- Qualifications, references.	Post review
	Selective contracts meeting the requirements of 3.9 to 3.12 of the Consultant Guidelines	SSS	Prior agreement

a/ Prior review threshold would be reviewed after 18 months and adjusted, if necessary.

Post Review

33. For compliance with the IDA's procurement procedures, IDA will carry out sample post review of contracts that are below the prior review threshold. Such review (ex-post and procurement audit) of contracts below the threshold will constitute a sample of about 20 percent of the post-review contracts in UGC. For procurement under AIF by universities, post-review of contracts will be done by UGC through independent external procurement auditors. It is envisaged that this procurement audit will be done on a semi-annual basis and the reports will be readily shared with The Bank.

Review of Procurement Performance

34. IDA will monitor the compliance with the requirements of IDA's different procurement methods and performance standards on a continuous basis. As part of the project's planned annual review/mid-term review, a comprehensive assessment of procurement performance will also be carried out. Based on the review, in consultation with the Government, the WB may revise the prior review threshold, including the procurement and selection methods.

35. **Frequency of procurement supervision missions proposed.** Once every six months. Besides, as part of the fiduciary control, IDA's staff and independent consultant, as deemed appropriate, will carry out post review/procurement audit of contracts.

F. Details of the Procurement Arrangements Involving International Competition

1. Goods, Works, and Non Consulting Services

Table 3: Tentative list of contract packages to be procured following ICB/NCB and direct contracting

1	2	3	4	5	6	7	8	9
Ref. No.	Contract (Description)	Estimated Cost (million US\$)	Procurement Method	P-Q	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
G-1	Procurement of IT package for BdREN	22.0	ICB		No	Prior	December 2009	
G-2	Procurement of computers and accessories	0.6	ICB/NCB		Yes (if ICB)	Prior/Post	August 2009	
G-3	Procurement of vehicles	0.25	NCB		N/A	Post	August 2009	
G-4	Fiber-Optic Connectivity	3.0	DC		N/A	Prior	November 2009	

2. Consulting Services

Table 4: Tentative list of consulting assignments

1	2	3	4	5	6	7
Ref. No.	Description of Assignment	Estimated Cost (US\$ '000)	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments
S-1	Management and Operation of ICT Program	370	QCBS/QBS	Prior	October 2009	
S-2	Communication Specialist	220	IC	Prior	March 2009	
S-3	BdREN Implementation Consultants	1200	QCBS/QBS	Prior	March 2009	
S-4	Digital Library Specialist	160	IC	Prior	June 2009	
S-5	Financial Management Specialist	160	IC	Prior	March 2009	
S-6	Procurement Specialist (2 persons)	240	IC	Prior	March 2009	
S-7	M&E Specialist (Intl.)	160	IC	Prior	June 2009	
S-8	M&E Specialist (Local)	190	IC	Prior	June 2009	
S-9	Procurement Audit Consultant	20	FBS/CQ	Prior	September 2009	

Annex 9: Economic and Financial Analysis
BANGLADESH: Higher Education Quality Enhancement Project

I. Economic Analysis

A. Introduction

1. Given its particular composition—a large demand-side competitive fund and a substantial supply-side investment—this Project calls for a two-pronged economic analysis, namely a cost-benefits analysis for the AIF, and a cost-efficiency analysis for the BdREN.

2. This section begins with a discussion on the rationale for investing in higher education in Bangladesh, and more specifically in the activities to be supported by the proposed project. In the cost-benefit analysis completed for AIF, the streams of incremental wage gains expected by the project beneficiaries from AIF are weighted against the project associated costs. The analysis points to significantly positive returns. Sensitivity analysis also suggests that, within expected limits, returns remain positive. As far as the BdREN is concerned, the cost efficiency analysis demonstrates that the intervention has a clear advantage over using conventional means to deliver higher and more reliable connectivity, therefore, producing net cost savings associated with a better service.

B. Rationale

3. Recognizing in the *Poverty Reduction Strategy Paper 2005*, that lack of relevance of tertiary education has resulted in high unemployment and underemployment among graduates, the GoB aims to improve quality of higher education and research in areas such as information and communication technologies and biotechnology which are key to economic growth.¹⁸ Every business survey emphasizes the need to upgrade labor skills and ensure that the education system prepares graduates with skills needed by employers.¹⁹ Lack of managers with higher education and qualifications has also limited firms' productivity.²⁰ Moreover, the government lacks national strategies for research or mechanisms to link HEIs and research institutions with, industry and business in the key areas. The concept of government/ industry sponsored research is yet to be developed.

4. The proposed Project aims to improve the quality and relevance of teaching and research environment in higher education and research institutions. This objective will be achieved by (i) promoting academic innovation with focus on science and ICT fields, (ii) building institutional capacities, and (iii) raising the internet connectivity capacity of the higher education sector.

C. Higher Education and the Labor Market in Bangladesh

5. Bangladesh's labor market needs to absorb a rapidly increasing new wave of young entrants every year. Demographic transition is one of the key forces in shaping the economic and labor market landscape. In Bangladesh, population has been growing fast, though the growth rate

¹⁸ Government of People's Republic of Bangladesh, 2005, *Unlocking the Potential: National Strategy for Accelerated Poverty Reduction (PRSP)*.

¹⁹ World Bank, 2006, *Country Assistance Strategy for the People's Republic of Bangladesh: FY06-09*, Report No. 35193.

²⁰ World Bank, 2007, *Bangladesh Strategy for Sustained Growth, Vol. I: Summary Report*, Report No. 38289-BD.

has declined from 2.0 percent per year in 1991 to 1.6 percent in 2001.²¹ The labor force has been increasing even more rapidly at 2.5-2.8 percent into the 2000s.²²

6. Tertiary education leads to an increased chance for employment and higher earnings, and reduces poverty incidence. As illustrated in Table 1, the wage differences between those with and without tertiary education are significant in Bangladesh. In 2005, while employees with tertiary education earned US\$104 per month, those with complete lower secondary education earned only US\$50 and those with higher secondary education, US\$78.

Table 1: Tertiary education is the key for an increased chance for employment and higher earnings, 2000 & 2005

Education status	Percent of total population		2005			
	2000	2005	Employment rate (%)	Median monthly earnings (USD)	Median hourly rate (USD)	Poverty rate (%)
No education	63.5	57.1	48	29	0.15	51
Incomplete primary	6.7	7.4	54	30	0.16	38
Complete primary	8.1	8.9	49	37	0.18	35
Incomplete secondary	9.2	11.1	42	41	0.19	26
Complete lower secondary	8.2	10.6	39	50	0.24	15
Higher secondary	2.3	2.4	49	78	0.33	7
Tertiary	1.9	2.6	69	104	0.44	3

Source: Paci, P & Sasin, M, 2008, *Making Work Pay in Bangladesh: Employment, Growth, and Poverty Reduction*, The World Bank, Table 2.3.

Note: Exchange rate: US\$1 = Taka 61.5

7. This pattern is consistent with regional trends. In four selected South Asian countries, returns to schooling beyond secondary education are clearly higher than primary and middle education, as shown in Table 2. Returns to education tend to be higher for the high-growth countries (India and Pakistan) and lower for slower growing Sri Lanka. This suggests that for Bangladesh where the economy has been growing steadily and is expected to continue to do so in the coming years, returns to education, especially those to higher education, are likely to remain high. Furthermore, returns are also usually much higher for women. Greater access to higher education for women will reduce the gender gap in wages.

Table 2: In four selected South Asian countries, returns to schooling are higher beyond secondary education (percent)

Level of education	2000 Total	Bangladesh			India		Pakistan		Sri Lanka	
		2004			2004		2000/01		2001/02	
		Total	Female	Male	Female	Male	Female	Male	Female	Male
Primary	7.0	4.7	13.4	4.2	6.7	8.2	5.4	4.1	1.9	7.6
Middle	-	-	-	-	10.3	8.2	17.1	6.2	17.8	10.0
Secondary	6.4	4.1	11.6	3.3	31.5	20.0	30.2	12.3	10.0	8.1
Higher secondary	10.8	7.1	2.2	7.5	20.7	14.2	18.5	11.9	14.7	19.6
Tertiary	10.7	9.0	10.5	8.9	16.8	15.6	18.9	11.9	11.7	7.5

Source: Riboud, M, Savchenko, Y, & Tan, H, 2007, *The Knowledge Economy and Education and Training in South Asia*, The World Bank, Tables 3.2 & 3.3.

8. International evidence from East Asia and Latin America also suggests that returns to one additional year of schooling are considerable, in particular, for those with university qualifications for all countries, as illustrated in Table 3. The table also shows that returns, by and

²¹ Bangladesh Bureau of Statistics, 1991 and 2001 Census, http://www.bbs.gov.bd/dataindex/census/bang_atg.pdf.

²² Paci, P & Sasin, M, 2008, *Making Work Pay in Bangladesh: Employment, Growth, and Poverty Reduction*, The World Bank.

large, decrease for higher income quintiles in low-income countries in East Asia (except for Singapore, a high-income country), indicating that education investments tend to equalize earnings. The results are opposite among Latin American countries, however, suggesting that investment in education may increase inequality. These findings may suggest that Bangladesh—a low-income country similar to many East Asian countries—is likely not only to gain high returns to investment in education, but also to enhance equality between the poor and rich.

Table 3: Returns to one additional year of schooling are considerable in East Asian and Latin American countries (male wage earners, 25-65 years, %)

Country	Average return (%)	90th-10th quintile ^{1/}	Primary		Secondary			Polytechnic Higher technical	Tertiary
			Lower	Upper	Lower	Upper (general)	Vocational		
Cambodia	38.3	-44.6	100.1**		25.7**	32.0**	39.2**		17.5**
China	12.1	-4.7	21.1		4.4*	8.4**	9.5**		9.8**
Indonesia	11.4	-0.9	8.4**		8.6**	10.7**	11.7**		13.6**
Mongolia	8.5	-4.5	11.0		7.5	8.1*	7.8*		8.8**
Philippines	11.6	-3.3	16.0**			7.5**			19.8**
Singapore	11.9	4.3	8.5**			7.6**	8.3**	17.4**	23.7**
Thailand	15.2	-5.3	7.7**	12.0**	14.3**	11.5**	13.4**		22.0**
Vietnam	7.2	-4.4		8.5	-2.3	2.7**	4.7**		10.5**
<i>East Asia Mean</i>	<i>14.5</i>	<i>-7.9</i>							
<i>East Asian Mean excl. Cambodia</i>	<i>11.1</i>	<i>-2.7</i>							
Argentina	11.0	4.2	8.3**			7.6**	8.9**	11.6**	19.5**
Bolivia	10.3	6.2	14.2*			4.3**		25.0**	22.0**
Brazil	15.7	6.4	12.4**		6.3**		6.9**		28.0**
Chile	12.0	7.0	13.0**			11.6**	17.6**		24.4**
Colombia	10.4	5.5	13.2**			7.5**		8.1**	16.1**
Guatemala	12.6	5.3	5.2			11.3**			21.2**
Mexico	11.3	2.4	12.4**		8.6**	12.0**			17.5**
Venezuela	9.9	3.3	18.6**			6.6**		13.5**	14.7**
<i>Latin America Mean</i>	<i>11.6</i>	<i>5.0</i>							

Source: Patrinos, H.A., Ridao-Cano, C & Sakellariou, C, 2006, *Estimating the Returns to Education: Accounting for Heterogeneity in Ability*, World Bank Policy Research Working Paper 4040, Tables 3 & 6.

Notes: ^{1/} The difference between the lowest (10th) quintile of the earnings distribution and that in the highest (90th) quintile.

* indicates significance at the 5 percent level; ** indicates significance at the 1 percent level.

9. While returns to education are higher for those with longer years of schooling, data on unemployment rates in the four South Asian countries show higher unemployment rates among more educated workers (Table 4). Indeed, in Bangladesh, almost one fourth of the unemployed hold a senior secondary certificate (SSC), higher secondary certificate (HSC) or higher degree.²³ However, the relatively higher unemployment rates among the more educated “should not detract policy makers from investing in education”.²⁴ Even though the more educated initially have higher rates of open unemployment because of their more intensive search for a good job match, their unemployment rates are subsequently lower than those of other groups as they gain labor market experience.

²³ The World Bank, 2007, *Bangladesh: Strategy for Sustained Growth, Vol. 1: Summary Report*, Report No. 38289-BD.

²⁴ Riboud, M, Savchenko, Y & Tan, H, 2007, *The Knowledge Economy and Education and Training in South Asia*, The World Bank, p. xv.

Table 4: Unemployment rates tend to be higher among more educated workers in selected South Asian countries (economically active population aged 15-64, percent)

Level of education	Bangladesh		India	Pakistan	Sri Lanka
	2000	2004	2004	2003/04	2003/04
Illiterate	3.81	0.65	2.74	1.83	1.16
Literate, less than primary	5.90	1.00	3.15	3.37	2.07
Primary	7.85	1.97	4.29	3.57	3.85
Middle	-	-	6.03	5.43	10.67
Secondary	8.24	3.11	7.81	8.80	13.40
Higher secondary	8.27	1.48	9.20	9.86	18.47
Tertiary	7.15	3.79	11.86	8.21	8.82
Total	5.57	1.51	5.07	4.29	8.96

Source: Riboud, M, Savchenko, Y & Tan, H, 2007, *The Knowledge Economy and Education and Training in South Asia*, The World Bank, Tables 4.1.

D. Expected Benefits of the Academic Innovation Funds (AIF)

10. An innovation fund is a pool of discretionary funds that are earmarked for one or more uses. With more than 30 innovation funds being experimented in various parts of the world, including Chile, Uruguay, Ethiopia, Vietnam, Mozambique, Ghana, and Indonesia, the generic benefits of such instruments start to become clear. Some of these benefits can be quantified; others are more intangible and difficult to precisely measure. Two kinds of benefits are estimated for the HEQEP: those related to relevance and those accruing as increased wages and employment.

Generic Benefits (international experience)

11. International experience suggests that innovation funds are highly effective mechanisms for improving the *transparency* and *efficiency* of the budget allocation process in higher education systems, and for boosting educational *quality* and *relevance* within tertiary institutions.²⁵ They offer four main types of benefits. First, the competitive aspect of these funds generally makes them more efficient instruments for the allocation of public funding within higher education than more traditional approaches based on budgetary planning. Second, they are effective mechanisms for improving educational quality and relevance in higher education. Third, their incentive system fosters changes in professional attitudes and institutional culture through awards for creative thinking. Fourth, innovation funds are very flexible and can quickly respond to changing policy priorities.²⁶

Quantitative Benefits

12. AIF will contribute to improve quality and relevance of education in beneficiary universities and faculties and is expected to generate significant economic benefits relative to project costs, accruing in a stream of incremental earnings. Assumed costs and benefits of the AIF investment and parameter values for base scenario and sensitivity analysis are summarized in Table 5.

²⁵ Saint, W, March 2006, *Innovation Funds for Higher Education: A Users' Guide for World Bank Funded Projects*, Education Working Paper Series No. 2, The World Bank.

²⁶ In addition, competitive funding for research is expected to have an impact on research publications. For instance, it has been estimated that receiving a National Institute for Health (USA) postdoctoral fellowship increases five-year publication rates by roughly 20 percent. Jacob, Brian & Lefgren, Lars, 2007, *The Impact of Research Grant Funding on Scientific Productivity*, NBER Working Paper Series 13519.

Priced Benefits: The principal monetary benefits analyzed are the incremental increase in the earnings of beneficiary students.

Direct Project Related Costs: The direct project related costs include (i) the public investment made through the proposed Project (IDA Credit), (ii) counterpart funds from private universities, and (iii) service and commitment charges on the credit.

Indirect Project Related Costs: The relevant indirect costs are the additional public recurrent costs that may be generated by the project: (i) replacement/upgrading of capital investment such as computers and laboratory equipment; (ii) additional operational and maintenance costs generated by new and refurbished infrastructure during and beyond the project period to sustain the project benefits.

13. In the base scenario, it is expected that 20 percent of total students in the beneficiary universities will benefit from various sub-projects and improve their skills and knowledge due to the project intervention and earn 10 percent higher life-time wages, compared to wages without the project. A sensitivity analysis adopts higher and lower assumptions on the proportion of beneficiary students and wage increases: 15 and 25 percent for the former, and 5 and 15 percent for the latter.

Table 5: Priced benefits and direct and indirect project related costs – Assumed parameter values for base scenario and sensitivity analysis

BENEFITS	
1. Incremental earnings	
Average wage level of university graduates (2005) ^{1/}	T.k. 6,417 (USD 104) per month
Inflation rate ^{2/}	6-7 percent
Real wage increase rate ^{3/}	5-11 percent
Annual wage growth rate for university graduates	
(W1) Low scenario	5 percent
(W2) Base scenario	10 percent
(W3) High scenario	15 percent
2. Beneficiaries (university students)	
Number of university students (2008)	Public universities: 125,000 Private universities: 99,000 of which, eligible private universities: 40 percent
Student population growth rates ^{4/}	2.0-3.5 percent per year
Number of total beneficiary students per year	
(B1) Low scenario	15 percent of total students
(B2) Base scenario	20 percent of total students
(B3) High Scenario	25 percent of total students
Number of beneficiary graduates per year	20 percent of the total beneficiary students
The first year when beneficiary students graduate	2012
The last year when beneficiary students graduate	2016
COSTS	
IDA Credit	USD 49 million
Private universities' counterpart funds	USD 1 million
Government's investment (Replacement of IT equipment)	30 percent of AIF, replaced twice after 5 year life time
Government's investment (Replacement of laboratory equipment)	30 percent of AIF, replaced once after 10 year life time
Government and universities' maintenance and operational costs	3 percent of total AIF
Service charges	0.75 percent per annum on disbursed amount
Commitment charges ^{5/}	0.1 percent per annum on undisbursed amount

^{1/} HIES (2005)

^{2/} Based on inflation rate in the last decade (2.8 to 8.7 percent).

^{3/} Based on real GDP growth rate in the last decade (4.5 to 6.5 percent).

^{4/} Student population growth rate is estimated based on the demographic data for university-aged population and on an assumption of 1 to 2 percent growth in enrollments per year.

^{5/} Commitment charges are revised annually. It was 0.5 percent for FY04, 0.35 percent for FY05, 0.3 percent for FY06, 0.2 percent for FY07, 0.1 percent for FY0.8, and 0 percent for FY09

(<http://intranet.worldbank.org/WBSITE/INTRANET/UNITS/INTCFP/0>)

14. The AIF is expected to generate significant economic benefits relative to project costs. The estimated internal rates of return (IRR) to the AIF investment under the various scenarios are summarized in Table 6. The IRR for the base scenario is estimated at 17.9 percent. In the lowest scenario in which 15 percent of the university students will earn 5 percent higher wages, the IRR is estimated to be 4.7 percent, while in the highest scenario in which 25 percent of students will earn 15 percent higher wages, it is estimated to reach 28.1 percent.

Table 6: AIF investment is expected to generate substantial returns

		Wage increase		
		Low (5%)	Base (10%)	High (15%)
Beneficiaries	Low scenario (15%)	4.7%	13.8%	19.6%
	Base scenario (20%)	8.3%	17.9%	24.2%
	High scenario (25%)	11.3%	21.3%	28.1%

Non-quantitative benefits

(a) Relevance: AIF will target priority areas to improve quality and relevance of higher education and to strengthen research capacity for economic growth

15. For innovation funds to yield the expected benefits discussed above, it is crucial that they will be invested in improving quality and relevance of higher education which will match the country's national strategic priorities and labor market needs. Despite the relatively high proportion of students in science streams,²⁷ limited understanding of labor market demand and lack of relevance of higher education has resulted in an acute shortfall of science and technology graduates, particularly in engineering.²⁸ Universities are expected to supply more and better qualified graduates in applied science, information and communication technology, and trade and commerce among others who are highly demanded in the local and global labor markets.

16. AIF will provide funding for universities to improve teaching and learning and undertake quality research work. Of the total AIF resources (US\$50 million), 40 percent will be allocated to improvement of teaching-learning at undergraduate and masters levels (Window 1), 40 percent to improvement of research capabilities at all levels and for post-graduate research programs (Window 2), and 20 percent for university-wide activities (Window 3). Of the first two windows, 75 percent of Window 1 and 85 percent of Window 2 will be allocated to physical, biological and earth sciences, engineering and technology, agriculture, livestock and fisheries, medical, health and nutrition science subjects, and 15 percent of each Window to arts, humanities and social science. By allocating more than 60 percent of the AIF to science and technology disciplines, the project will provide incentives for universities to attract better qualified teachers, improve the quality of facilities and programs, and produce more marketable students for the labor market especially in these disciplines. A considerable portion of Window 3 is expected to be invested in campus networks, which will allow universities to take full advantage of the BdREN and get connected to the international academic and research network, as discussed below.

Governance: AIF to enhance accountability of universities and to improve efficiency and transparency of higher education financing

²⁷ Of about 116,000 students in public universities in 2005, 20.8 percent were enrolled in arts faculty and 16.2 percent in social science, whereas 26.8 percent were enrolled in science faculty and 17.7 percent in agriculture and engineering (Source: Bangladesh Bureau of Educational Information & Statistics (BANBEIS), Ministry of Education, 2005, *National Education Survey (Post-Primary)—2005: Final Report*, Table 7.8).

²⁸ University Grants Commission of Bangladesh, 2007, pp. 14, 19.

17. Primary benefits of the project investment include non-monetary benefits such as changes in organizational behavior, professional attitudes and institutional culture through awards for creative thinking promoted by the built-in incentive system in AIF. These changes are crucial to strengthen institutional foundation for *quality* and *relevance* improvement in teaching and learning as well as in research. AIF is also an instrument to allocate additional public funds *efficiently* and *transparently* and to strengthen *institutional management capacities* and *accountability* of eligible universities. Currently, the government allocates budgets to public universities based on actual spending in the previous years and negotiation, but not on objective criterion or performance. Universities are allowed to carry over savings, but such savings have often resulted in reduction of the public subsidy in the following year, discouraging them to be efficient and cost-effective. AIF can help improve these weaknesses. Principles of the AIF are strict impartiality and transparency with clearly identified selection criteria and procedures and public disclosure of the decisions. Universities will be fully accountable for the management of funds. Inclusion of private universities in AIF will also allow spreading funding efficiently regardless of the ownership of the universities.

E. Expected Benefits of BdREN

18. The proposed project will support the creation of the Bangladesh Research and Education Network (BdREN) — a high performance information and communications technologies (ICT) network providing high speed connectivity—among higher education and research institutions in both the public and private sectors. The network will support geographically dispersed academics, scientists and researchers with reliable access to high-end computing, simulation tools, massive datasets, library, and research resources such as journals. It will also help close the digital divide between universities in Bangladesh.

19. Given the current ICT capacity and spending on internet connectivity, the establishment of BdREN is expected to lead to significant cost savings for much required, cost-efficient connectivity and communication within the academic community. Despite the reductions in bandwidth prices for education institutions mandated by the Bangladesh Telecommunications Regulatory Commission, the cost for these institutions to access higher speed connectivity remains prohibitive. This has constrained the majority of universities and institutions from accessing the international academic and research network.

20. Comparing the current spending on internet connectivity and potential savings through BdREN shows the following results (Table 7). Currently, Bangladeshi universities and research institutions spend about US\$170 per Mbps or US\$850-1,000 per month for about 6 Mbps on average. Starting in August 2008, the base price of bandwidth is set at US\$315 per Mbps, and with the new discount rates at 75 percent for public universities and 25 percent for private universities, the price of bandwidth will be US\$80 per Mbps for the former and US\$235 per Mbps for the latter. Even with these educational discounts, the cost of providing 50 Mbps for the expected beneficiaries of about 100 universities and research institutions will be US\$9-10 million per year. With BdREN, it is estimated that the 100 Mbps will cost only US\$4 million per year—less than half the current cost for double the bandwidth. Thus, the improved connectivity capacity for lower costs will provide a considerably higher proportion of students, faculties and researchers with internet access, as illustrated in Table 8. Furthermore, once established and operational for universities, the BdREN membership can easily be extended to affiliated colleges at a lesser cost.

**Table 7: BdREN will save costs on internet connectivity
for universities and research institutions.**

Baseline (current spending)		
Average price of bandwidth per Mbps that universities/institutions are currently paying for various providers		USD 170 per Mbps
Average spending on internet access per university/institution		On average USD 850-1,000 per month Larger institutions: USD 2,000-3,000 per month Smaller institutions: USD 100-300 per month
Average bandwidth for internet access per university/institution		6 Mbps per month
Estimated total spending on internet access by 100 universities/institutions per year		USD 1.2 million per year
By 2013		
With Project	Estimated spending on BdREN for 100 Mbps by 100 institutions	USD 4.0 million per year
Without Project	Estimated spending on internet access for 50 Mbps by 100 institutions	USD 9.4 million per year
Projected price of bandwidth for internet access (Aug 2008-		Tk 22,000 (USD 315) per Mbps
Average discount for bandwidth for educational institutions	50 percent (75 percent for public; 25 percent for private)	
Assumed average bandwidth for internet access per university/institution		50 Mbps per month

**Table 8: BdREN will provide better internet connectivity
for students, faculty and researchers in Bangladesh.**

		Student	Faculty	Researchers
Baseline	Number of beneficiary population	225,000	12,000	1,000
	Email	5%	100%	100%
	Campus network	1%	20%	20%
By 2013	Number of beneficiary population	243,000	13,000	1,100
With Project	Email	75%	100%	100%
	Campus network	40%	100%	100%
Without Project	Email	20%	100%	100%
	Campus network	2%	30%	30%

F. Alternative Considered: Expansion of Access

21. Given the limited increases in public spending on higher education, the rapid growth in distance education and private universities has compensated for lack of public investment. While the number of students in public universities only doubled from 77,700 (13 universities) in 2000 to 153,200 (27 universities) in 2006, that of private universities almost quadrupled from 32,800 (18 universities) in 2000 to 124,300 (51 universities) in 2006.²⁹ In addition, the National University enrolled 773,000 students and Open University 84,000 in 2004/05.³⁰ Despite these increases in recent years, access remains one of the lowest in the region. Based on various assumptions on enrollment growth, the UGC has estimated the costs of establishing new universities to accommodate increasing enrollments.³¹ Under the base case, the total investment costs to accommodate the projected increases in enrollments are estimated to be US\$233 million by 2015, US\$712 million by 2020 and US\$1,530 million by 2025. While demand for, and supply of, higher education in Bangladesh will certainly continue growing even without Bank's involvement, there has been little investment in quality control and enhancement in existing higher education institutions. Therefore, it is more urgent and crucial to strengthen the systemic foundation of the higher education sector and develop institutional capacities of existing universities to improve quality and relevance before massively investing in further expansion.

²⁹ Source: UGC.

³⁰ Source: UGC (2006).

³¹ UGC, 2005, *Report of the Future Funding Gap*, Dhaka.

II. Financial Analysis

A. Introduction

22. This analysis frames the fiscal impact of the Project within the overall education budget and the total budget. The analysis suggests that the fiscal space to accommodate the costs of the project in the short and medium term is relatively limited, and that the full project implementation represents a significant increase of allocations to the sector (currently below standards in countries of comparable economic level, if assessed as a proportion of the GDP).

23. The sustainability of both AIF and BdREN investments depends on their success in convincing the stakeholders of their benefits. The analysis suggests that long-term financial viability of both schemes will ultimately require a combination of increased budgetary allocations, subscriptions from higher education institutions, and the introduction of cost-sharing with end-users.

B. Education Expenditures

24. In 2007/08, Bangladesh spent 2.1 percent of GDP or 12.4 percent of the total government expenditure on education through the Ministry of Primary and Mass Education for primary and non-formal education and the Ministry of Education for secondary and Higher Education (Table 9).^{32,33} Of the total education budget, 6.1 percent was spent on higher education. A very high percentage of the higher education budget is allocated to teachers' salaries and benefits, leaving little for non-salary recurrent spending such as equipment, computers, books, journals, and building maintenance.³⁴ The share on higher education is much lower than some other developing countries in Asia: for instance, India spends 20.3 percent of the total education budget on higher education, Thailand 19.2 percent, and Malaysia 33.3 percent. The government's Higher Education Strategy aims to boost higher education spending from the current level at around 0.15 percent to at least 0.3 percent of GDP.³⁵ As shown in Figure 1, if the government increases the higher education budget by 20 percent per year, instead of the current level of 10 percent, it will reach 0.22 percent of GDP in 2013/14, and if increased by 30 percent, 0.30 percent of GDP. However, according to the recent government's MTBF, higher education spending is projected to remain at around 0.15 percent of GDP until 2010/11. The low spending is reflected in, as well as a reflection of, the extremely low gross tertiary enrollments rates in Bangladesh, 6.0 percent, compared to 11.8 percent in India, 17.0 percent in Indonesia, or 28.6 percent in Malaysia.³⁶

³² Bangladesh Economic Review 2008. Economic Advisor's Wing, Finance Division, Ministry of Finance.

³³ Other ministries also allocate some budget to education, for instance, the Ministry of Health to the Medical University and the Ministry of Agriculture to the Agriculture University. They consist relatively a small amount and are not reflected here due to data unavailability.

³⁴ University Grants Commission of Bangladesh, 2006, p. 58.

³⁵ *Ibid.*, p. 10.

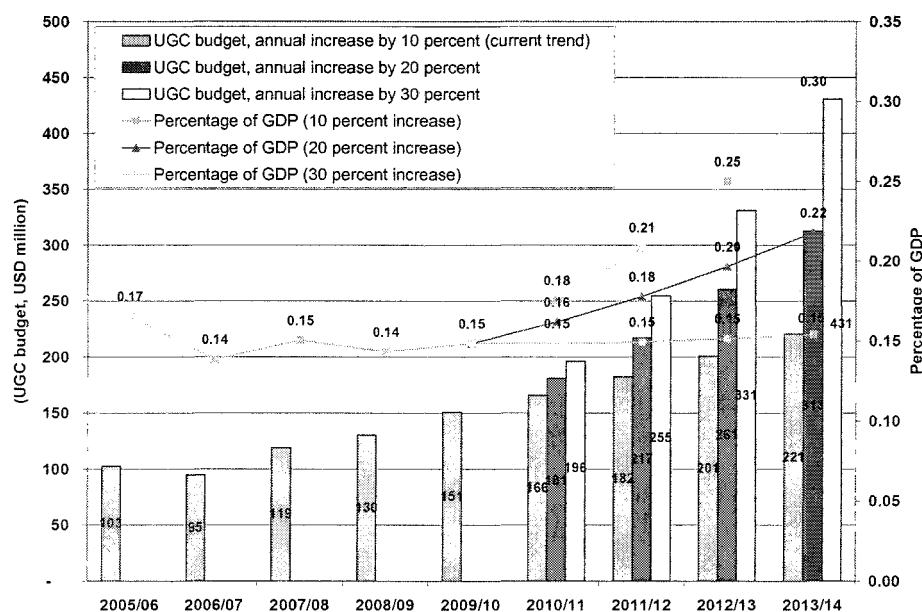
³⁶ World Bank, EdStats. Data shows the most recent year available between 2005 and 2007 for each country.

Table 9: Public expenditure on education, in particular higher education has been low, and is expected to remain low in the near future
(US\$ million)

		2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
GDP at current prices	A	61,975.2	68,443.4	79,112.2	90,870.8	101,551.7	111,750.7
Public Expenditure	B	11,709.6	12,853.8	14,851.8	18,720.1		
Non-development		8,390.7	9,017.8	11,449.8	14,746.3		
Development (ADP)		3,318.8	3,836.0	3,402.0	3,973.7		
Education budget	C=D+E	1,356.9	1,553.2	1,672.2	1,865.3	2,205.7	2,402.4
Non-development		946.2	1,147.7	1,252.4	1,377.8	1,379.5	1,470.5
Development		410.7	405.5	421.5	487.5	826.2	931.9
Ministry of Primary and Mass Education	D	569.3	724.3	770.1	867.0	1,045.6	1,118.8
Non-development		316.7	464.1	494.6	523.1	501.8	516.0
Development		252.6	260.3	275.4	343.9	543.8	602.7
Ministry of Education	E	787.6	828.8	902.1	998.3	1,160.1	1,283.6
Non-development		629.5	683.6	757.7	854.8	877.7	954.5
Development		158.1	145.2	146.1	143.6	282.3	329.1
of which UGC	F	102.5	94.8	119.0	130.1	150.8	166.5
Non-development	G	74.5	76.4	94.4	105.6		
of which Academic Research Fund (2007/08-)	H	-	-	1.5	2.2		
Development	I	28.0	18.4	24.6	24.6		
of which Research/Project Funds	J	0.1	0.1	0.2	0.5		
Ministry of Science & ICT	K	24.4	27.3	32.8	39.1	48.4	54.2
of which Research Grants	L	n.a.	n.a.	0.8	n.a.		
<i>Education/Total public expenditure (percent)</i>	M=C/B	11.6	12.1	11.3	10.0		
<i>Education/GDP (percent)</i>	N=C/A	2.2	2.3	2.1	2.1	2.2	2.1
<i>University/Total public expenditure (percent)</i>	O=F/B	0.9	0.7	0.8	0.7		
<i>University/GDP (percent)</i>	P=F/C	0.17	0.14	0.15	0.14	0.15	0.15
<i>Education budget annual increase (percent)</i>	C	n.a.	14.5	7.7	11.5	18.2	8.9
<i>MOE budget annual increase (percent)</i>	D	n.a.	5.2	8.8	10.7	16.2	10.7
<i>UGC budget annual increase (percent)</i>	E	15.4	(7.5)	25.5	9.3	15.9	10.4

Sources: Bangladesh Economic Review, various issues, Medium Term Budgetary Framework, various issues, <http://www.mof.gov.bd>.

Figure 1: The government will need to increase public spending on higher education considerably to meet its strategic target to 0.3 percent of GDP.
(US\$ million)



25. Higher education spending is also unevenly distributed. Per student spending varies widely between public universities (Table 10). Needless to say, some fields such as medical and engineering faculties are more costly than others. However, some universities may be

disadvantaged for unjustifiable reasons under the existing funding mechanism based on historical allocations and negotiation.

Table 10: Universities' University Grants by University, 2004/05
(US\$ million, US\$ per student)

University	Recurrent Grant	Development Grant	Special Grant	Maintenance Grant	Others	Total	Enrollment	Per student recurrent spending (USD)	Per student development spending (USD)	Per student total public spending (USD)
Dhaka University	15.0	2.0	0.5	0.7	0.1	18.3	24,060	624	84	761
Rajshahi University	9.8	0.3	0.5	0.2	0.0	10.8	26,691	366	11	406
Bangladesh Agri University	8.7	0.1	0.2	0.2	0.0	9.1	4,272	2,037	24	2,141
Bangladesh Univ. of Engineering and Tech.	5.4	0.4	0.2	0.1	0.0	6.1	7,773	696	53	760
Chittagong University	5.5	-	0.2	0.4	0.0	6.0	14,873	367	-	404
Jahangirnagar University	4.8	0.4	0.2	0.2	0.0	5.7	8,105	596	53	702
Islamic University	2.2	-	0.3	-	0.0	2.5	9,284	237	-	266
Shahjalal University	1.6	0.6	0.1	-	0.0	2.3	5,939	271	98	386
Khulna University	1.5	-	0.1	-	0.0	1.6	4,086	355	-	380
National University	-	-	-	-	0.0	0.0	-	-	-	-
Open University	2.4	0.4	0.2	-	0.0	3.0	-	-	-	-
Bangabandhu Sheikh Mujib Medical University	1.8	-	-	-	0.0	1.8	704	2,495	-	2,500
Bangabandhu Sheikh Mujibur Rahman Agri. Univ.	0.6	0.5	0.0	-	0.0	1.2	394	1,586	1,382	3,012
HM Danesh University	0.6	1.2	0.2	-	-	2.0	903	710	1,306	2,189
Bhashani University	0.2	0.9	0.3	-	-	1.3	166	909	5,511	7,966
Patuakhali University	0.7	0.9	0.3	-	-	1.8	578	1,172	1,578	3,194
Sher-e-bangla Agri University	0.8	-	0.3	-	-	1.1	1,157	717	-	939
Chittagong Univ. of Engineering and Tech. (CUET)	0.9	2.8	-	-	-	3.6	1,871	456	1,484	1,940
Rajshahi Univ. of Engineering and Tech. (RUET)	0.8	2.3	-	-	-	3.1	1,763	451	1,322	1,773
Khulna Univ. of Engineering and Tech. (KUET)	0.9	3.0	-	-	-	3.9	1,791	490	1,671	2,161
Dhaka Univ. of Engineering and Tech. (DUET)	0.7	2.8	-	-	-	3.5	1,519	465	1,867	2,333
Noakhali University	-	3.3	-	-	-	3.3	-	-	-	-
Nazim Islam University	-	1.1	-	-	-	1.1	-	-	-	-
Comilla University	-	1.4	-	-	-	1.4	-	-	-	-
Barisal BM University	-	0.5	-	-	-	0.5	-	-	-	-
Jagannath University	-	1.3	-	-	-	1.3	-	-	-	-
Total (USD million, USD per student)	64.7	26.3	3.3	1.7	0.2	96.3	115,929	558	227	831

Source: UGC

Note: Exchange rate at Tk. 60.4 per US\$ (2004 end of period).

26. Another constraint in higher education financing in Bangladesh is that public universities lack diversified sources of income, and have increasingly depended on government funding, up to 95 percent of their total revenue today. Tuition fees for public universities are extremely low, ranging from Tk. 150-350 (US\$2.2-5.1)³⁷ per annum with some variation among faculties and universities, which has not changed at all in the last several decades despite repeated attempts by the government to raise them. Moreover, universities generate very little incomes from other activities. Hence, the Strategy aims to reduce the current extremely high dependency on public funding for higher education from 95 percent of expenditures for public universities. In contrast to public universities, recently established private universities collect fees according to credit hours at a rate of Tk. 75-300 (US\$1.1- 4.4), thus generating substantial own revenues.

C. Fiscal Impact of Project Investment on the Higher Education Budget

a) *Sustainability of AIF*

27. At present, GoB finances research projects through various channels. First, UGC allocates a small amount of research funds to universities (US\$0.1 million in 2005/06 to US\$0.5 million in 2008/09). Second, the Ministry of Finance created a new Academic Research Fund (ARF) for universities in 2007/08, though the allocated budget (US\$1.5 million) was unspent due to lack of an established funding mechanism. In 2008/09, MOF increased the ARF allocation to US\$2.2 million, indicating the government's commitment to invest in research at universities. MOE is in the process of preparing guidelines, which then will have to be disseminated to universities through the UGC. Third, the Ministry of Science, Information and Communication Technology provides funding for R&D projects, though the total amount is limited (US\$0.8 million in 2007/08). In total, around US\$3.5 million are currently allocated to research.

³⁷ At US\$ 1 = BDT 68.5 (June 2008).

28. HEQEP will invest US\$50 million in AIF over a four year period, or US\$12.5 million on average per year over four years (since the first year will be spent on preparation). Compared to the government's own research funds, this is substantial. As 40 percent of the AIF allocation is channeled to research and 40 percent to teaching and learning, to sustain the impact of AIF, the government ideally should allocate about US\$ about 5 million per year to each of these windows in a competitive manner. Providing that AIF proves to be successful, the GoB has indicated a possibility of institutionalizing the new competitive funding mechanism by increasing its own budget for research, currently allocated through ARF and other channels. Given the government's willingness to increase budget allocations to develop universities' research capacities, a successful implementation of AIF will be the key for its own sustainability.

b) Sustainability of BdREN

29. During the project period, all recurring costs for BdREN will be financed under the Project. After the project period, BdREN is expected to bear annual operational costs of approximately US\$3.5- 4 million as well as reinvestment costs of about US\$2 million in Year 4 of BdREN operations and further US\$0.75 million every year thereafter. As in the case of most countries operating a REN, it is expected that the GoB will need to subsidize part of these costs. Estimated costs to the government will be 1-3 millions per year, depending on the cost-sharing scheme as discussed below.

30. The sources of revenues for BdREN may include:

- **Subscription fees:** The sustainability of BdREN beyond the project period depends on its ability to provide a high quality of service and attract public and private universities to participate as fee paying subscribers. Charges may include the following: membership fee, commodity (internet1) bandwidth charge, international REN (internet2) bandwidth charge, Intranet traffic charge (between REN member institutions), and local access loop charge. Universities may be offered a number of packages to subscribe to, depending on the size of the user base and the amount of bandwidth that is expected to be utilized. The aim should be to cover a substantial part of the recurring costs from subscription fees. For public universities, UGC will deduct the subscription fees from their respective budget and transfer the amount to BdREN.
- **User fees:** Participating institutions should charge students and faculty staff a nominal monthly user fee and pass it on to BdREN.
- **Direct grants for BdREN:** In many countries, the government also directly funds the REN. It is recommended that UGC finance the gap between income and recurring expenditures of BdREN on an annual basis.
- **Endowment:** The government may establish an endowment fund to finance reinvestment needs. Such capital improvements may be funded via various science research and higher education funding sources, including the government's own spending, industry, and donors. An endowment fund of about US\$6 million is envisaged by end of Project life.

31. Table 11 illustrates possible cost-sharing scenarios for subscription and user fees. First, as discussed in the economic analysis above, about 100 universities and research institutions currently spend approximately US\$1.2 million in total for internet connectivity. Hence, assuming that all of them participate in BdREN, the government should be able to collect at least US\$1.2

million as subscription fees from them, and most likely more due to increase in the bandwidth and better connectivity. Second, many students and faculty staff currently use commercial internet services and should be able to shift the current spending on internet to BdREN as user fees. Assuming that universities charge 25 percent of students a monthly user fee of 150 Tk. (US\$2.1), they will be able to collect US\$1.5 million per year (Table 12). Universities could charge a lower monthly fee (US\$1.4) per student for a larger proportion of students (35 percent) and collect about the same total amount (US\$1.4 million) or a higher fee (US\$2.8) for a smaller proportion (15 percent) for a slightly less total amount (US\$1.2 million). With the highest scenario on user fees (US\$2.8) and coverage (35 percent), subscription fees (US\$1.2 million) and user fees (US\$2.9 million) together may become sufficient to cover all the recurrent costs. Then, any gap between the total of subscription and user fees and the total recurrent costs needs to be filled by UGC (BdREN Trust).

Table 11: Part of recurrent costs for BdREN (est. US\$4.0 million per year) can be shared between subscribers and users

Subscription fees from universities/institutions	USD 1.2 million
Potential student computer fee structure for cost-sharing under various scenarios	USD 0.6-2.9 million
Percentage of students who will be charged computer fees	
(S1) Low scenario	15 percent of total students in public and private universities
(S2) Medium scenario	25 percent of total students in public and private universities
(S3) High scenario	35 percent of total students in public and private universities
Monthly computer fees	
(F1) Low scenario	100 Tk. (USD 1.4)
(F2) Medium scenario	150 Tk. (USD 2.1)
(F3) High scenario	200 Tk. (USD 2.8)

Table 12 User fees remain low, regardless of the spread
Potential student computer fee structure for cost-sharing (USD million)

Monthly computer fee per student	Percentage of students paying computer fees		
	Low (15%)	Medium (25%)	High (35%)
Low (USD 1.4)	0.6	1.0	1.4
Medium (USD 2.1)	0.9	1.5	2.1
High (USD 2.8)	1.2	2.0	2.9

c) Revenue Diversification

32. The *Higher Education Strategy* aims to gradually reduce the proportion of government grants in the total revenues of public universities—from the current level at 95 percent to 85 percent by 2009/10, 80 percent by 2014/15, and 70 percent by 2024/25. It seems unlikely to achieve the target by 2009/10 without an effective policy tool to do so. AIF will require private universities to contribute counterpart funds of 10 percent, which will yield additional US\$1 million. In the future, it is important to consider requiring public universities to provide counterpart funds as well to encourage them to raise their own revenues and to increase the overall spending on higher education and research.

d) More equitable allocation of public resources

33. Per student spending on public universities, particularly development grants, are very uneven between universities, as discussed above. Moreover, private universities currently do not receive any funding from the government. The Project will provide more equitable allocation of development budget for both public and private universities grouped according to their size based on objective criterion. The grant amount will range between US\$30,000 and US\$1 million, which will be a sizable amount for most universities and will be distributed on a more transparent and equitable manner, compared to the current level of development grants (from US\$0.1 million to US\$3.3 million in 2004/05).

Annex 10: Safeguard Policy Issues

BANGLADESH: Higher Education Quality Enhancement Project

I. Introduction

1. The project triggers one safeguard policy 'Environmental Assessment (OP/BP 4.01)', which will be addressed through an agreed Environmental Management Plan. The objective of Environmental Management Framework (EMF) prepared for Higher Education Quality Enhancement Project (HEQEP) is to ensure that environmental and social considerations and associated legal compliance requirements are efficiently and appropriately addressed during all stages of the project. It provides general policies, guidelines, codes of practice and procedures to be integrated into the implementation of the HEQEP.

II. Environmental Assessment

2. The proposed HEQEP is intended to enhance the quality of higher education through restoring the quality of teaching, learning and research, and building institutional planning and management capacity. The activities identified under the project are mainly technical assistance in nature and no major infrastructural activities are proposed. It will not require any acquisition of land, construction of any new building or major physical expansion. The proposed project may finance, among other things, small infrastructure renovation/refurbishing construction. These small scale construction activities are not anticipated to cause any major environmental impacts considering that all will be done within the existing structures in order to provide better facilities.

3. The proposed project will support six categories research activities under the Academic Innovation Fund (AIF). These are: i) Arts, Humanities and Social Sciences, ii) Business and Management, iii) Physical, Biological, and Earth Sciences, iv) Engineering and Technology, v) Medical, Health, and Nutritional Sciences, and vi) Agriculture, Livestock and Fisheries. These research activities can be laboratory based or field based. The research activities to be carried out under i) Arts, Humanities and Social Sciences and ii) Business and Management are not expected to create any major environmental impact. However, the research under other 4 categories may have negative impact on environment.

4. **EA Categorization:** Considering the nature and magnitude of potential environmental impacts from relatively limited scale of the renovation/refurbishing construction works and academic research works, the proposed operation is to be classified as category 'B'. Since the extent and exact locations of reconstruction works and research works are not known at this stage and may not be known at appraisal, the requirement to carry out an environmental analysis as part of project preparation can be waived but, for subprojects with potential adverse impacts, a limited environmental analysis/screening will be done during project implementation prior to approval for any sub-project.

5. **Environmental Screening:** The sub-projects that will involve infrastructure renovation/refurbishing construction works, the sub-project proponent i.e., public and private universities, their faculties, departments, centers and institutions will use an agreed checklist in EMF to identify activity that may have environmental impacts. The key issues to be considered are dust, noise, interruption of water supply and sanitation facilities, discharge of liquid waste, removal of refrigeration/air conditioning, removal of equipment and materials having

polychlorinated biphenyls (PCBs), asbestos, lead, silver or chrome, disposal of batteries, mercury containing device etc. Similarly, the applicant of research proposal will use another agreed checklist for key environmental issues related to waste disposal, air pollution, noise and dust etc. In addition to identification of possible environmental impacts, this checklist for research proposal will also provide a simple assessment of laboratory facilities and applicant's experience with laboratory.

III. Guidelines for preparation of Environmental Management Plan

11. The primary objective of the environmental management and monitoring is to record environmental impacts resulting from the sub-project activities and to ensure implementation of the 'mitigation measures' identified earlier in order to reduce adverse impacts and enhance positive impacts from specific sub-project activities. Having identified the potential impacts of the relevant sub-project through screening, the next step is the identification and development of measures aimed at eliminating, offsetting and/or reducing impacts to levels that are environmentally acceptable during implementation and operation of the project through the preparation and implementation of an Environmental Management/Mitigation Plan (EMP). EMP provides an essential link between the impacts predicted and mitigation measures specified. The entities implementing sub-projects (reconstruction/refurbishing and research work) will prepare EMP according to the guideline provided in the EMF. In addition, a monitoring plan will be prepared.

IV. Environmental Review and Clearance

12. All the sub-project proposals should be reviewed first at the institutional level and an environmental professional will be part of the review process. The University Grants Commission will ensure that a qualified environmental professional will be in each project review by the Area Review Panels (ARP) and approval committee (UGC Board for AIF (UGCBAIF)) at UGC. The measurable environmental indicators will be used along with other indicators for assessing the sub-projects. The institution will submit their proposal for small infrastructure renovation/refurbishing with an environmental checklist. Similarly, the applicant of research proposal will submit the environmental checklist as mentioned in EMF duly reviewed and signed by proposed supervisor and departmental head. This checklist will be used by the Area Review Panel (ARP) at UGC to assess possible environment and safety issues. The ARP will also review the mitigation and monitoring plan as appropriate. The committee can ask for further clarification or strengthening of the mitigation and monitoring plan. UGC will hire short-term consultant as needed to monitor the environmental safeguard issues in the selected sub-projects and publish quarterly report on environmental compliance of sub-projects based on agreed monitoring indicators. UGC will develop its own monitoring plan to oversee environmentally critical sub-projects. In addition, UGC will also assign two professional members of the staff as additionally responsible for reviewing the environmental safeguard issues in sub-projects.

V. Capacity-Building and Monitoring of Safeguard Framework Implementation

13. Environment Assessment (EA) in higher education sector project in Bangladesh will be introduced through this project. It is expected that HEQEP will provide an opportunity to the stakeholders involved to understand the overall benefit of EA in respect of sustainable development. As part of the capacity-building on environmental issues in University Grants Commission, selected staff will receive training in EMF application and environmental management. To assist in this capacity-building, and to provide subsequent guidance and review

of the EMF's application, the Government of Bangladesh (GOB) will contract specialist services for environmental management, as required. During supervision of these operations, the World Bank will assess the implementation of the EMF, and recommend additional strengthening, if required.

VI. Consultation and Disclosure

14. The EMF was shared by the Ministry of Education with concerned academic institutions, Department of Environment and civil society. As no potential affect is identified at this stage, field level consultation is waived here. The EMF was disclosed in both Bangla and English on the Ministry of Education (www.moedu.gov.bd) and UGC (www.ugc.gov.bd) websites in August 2008 and it will also be made available at the World Bank's InfoShop. Relevant subproject specific safeguard documents/mitigation plans (EMPs) prepared subsequently will also be disclosed to the public.

Annex 11: Project Preparation and Supervision
BANGLADESH: Higher Education Quality Enhancement Project

	Planned	Actual
PCN review	04/08/2008	04/08/2008
Initial PID to PIC	04/01/2008	04/16/2008
Initial ISDS to PIC	04/01/2008	04/15/2008
Appraisal	08/30/2008	08/27/2008
Negotiations	10/22/2008	11/19/2008
Board/RVP approval	03/17/2009	
Planned date of effectiveness	04/15/2009	
Planned date of mid-term review	06/15/2011	
Planned closing date	12/31/2013	

Key institutions responsible for preparation of the project:

University Grants Commission (UGC) and Ministry of Education (MoE), Government of Bangladesh

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Benoît Millot	Lead Education Specialist (co-TTL)	SASHD
Subrata Dhar	Sr. Operations Officer (co-TTL)	SASHD
Yoko Nagashima	Education Specialist	SASHD
Syed Rashed Al-Zayed	Research Analyst	SASHD
Mokhlesur Rahman	ET Consultant (Implementation Specialist)	SASHD
Burhanuddin Ahmed	Sr. Financial Management Specialist	SARFM
Marghoob Bin Hussein	Procurement Specialist	SARPS
Sachiko Kataoka	Education Economist	ECSHD
Lianqin Wang	Sr. Education Specialist	MNSHD
Michael Foley	Consultant (Information Specialist)	SARDE
Tenzin Dolma Norbhu	Senior ICT Specialist	CITPO
Shakil Ahmed Ferdausi	Environmental Specialist	SASDI
Fabio Pittaluga	Sr. Social Development Spec.	SASDI
Kishor Uprety	Sr. Counsel	LEGES
Vikram Raghavan	Sr. Counsel	LEGES
Chau-Ching Shen	Sr. Financial Officer	LOAFC
Nazma Sultana	Program Assistant	SASHD
Bertha Mburugu	Program Assistant	SASHD
Ricardo Reich	Consultant (Academic Competitive Fund)	SASHD
Hena Mukherjee	Consultant (Education Quality)	SASHD
Nusrat Jahan	Consultant (Financial Management)	SARFM
Hon Chan Chai	Consultant (Institutional Management)	SASHD
Javed Khan	Consultant (Research & Education Network)	SASHD

QER Panel Members and Peer Reviewers:

Juan Manuel Moreno, Sr. Education Specialist (ECSHD), Richard Hopper, Sr. Education Specialist (ECSHD), Jeffrey Waite, Lead Education Specialist (EASHD), Donna Thompson, Sr. Financial Management Specialist (SARFM), and Ghassan Alkhoja, Sr. Operations Officer (MNSHD).

Bank funds expended to date on project preparation:

Bank resources: \$470,000

Trust funds: \$210,000

Total: \$680,000

Estimated Approval and Supervision costs:

Remaining costs to approval: \$25,000

Estimated annual supervision cost: \$150,000

Annex 12: Supplemental Information on Academic Innovation Fund Activities

BANGLADESH: Higher Education Quality Enhancement Project

1. This Annex provides supplemental information on: (i) AIF - (a) University grouping: (b) AIF allocation by round, window, and discipline, and individual grant size (minimum and maximum) by university grouping; and (c) examples of eligible activities to be funded by the AIF; and (ii) Academic Innovation Fund (AIF) training and workshops (sub-Component 2.2).

I. Supplemental information on AIF:

2. **University grouping:** To ensure a level playing field and equity among the universities for AIF competition, universities will be divided into three groups (group A, B, and C) on the basis of academic capacity to produce modern teaching and learning, high quality research and international quality post-graduate programs. For the first round of proposal call, an absolute number of full time academics holding a PhD degree will be used to determine the academic capacity of universities. Allocation of funds for each group will be: 60 percent for Group A, 30 percent for Group B, and 10 percent for Group C. University grouping is in table 1. A criterion for university grouping for the second round will be determined before the announcement of proposal call.

Table 1: University Grouping by the Number of Teachers Holding PhD Degree

Groups	No. of teachers with PhD	% of AIF allocation per round	Institutions
Group A (15 Univ)	30+	60%	American International University Bangladesh, Bangabundhu Sheikh Mujibur Rahman Agri.Univ, Bangladesh Agricultural University, Bangladesh University of Eng. & Technology, Independent University Bangladesh (IUB), Islamic University, Jahangirnagar University, Khulna University, Khulna University of Eng. and Technology, Rajshahi University of Eng. and Technology, Shahjalal University of Science & Technology, University of Chittagong, University of Dhaka, University of Rajshahi, Islamic University of Technology
Group B (25 Univ)	10-29	30%	Dhaka University of Eng. and Technology, Patuakhali Univ. of Sci. & Tech., Sher-e-Bangla Agri. University, Ahsanullah University of Science & Technology, Bangabundhu Sheikh Mujib Medical University, BRAC University (BRACU), Chittagong University of Eng.and Technology, City University (CU) Dhaka, Daffodil International University (DIU), East-West University, Gono Bishwabidyalay, International Islamic University Chittagong (IIU), International University of Business Agric. and Tech., Jagannath University, North South University, Northern University Bangladesh (NUB), PrimeAsia University (PAU), South-East University, Stamford University Bangladesh (SUB), The University of Asia Pacific (UAP), United International University (UIU), Dhaka, University of Liberal Arts Bangladesh (ULAB), University of Science and Technology (USTC) Chittagong, Uttara University (UU), World University of Bangladesh (WUB)
Group C (41 Univ)	>10	10%	Asa University Bangladesh (ASAUB)Dhaka, Asian University of Bangladesh, Atish Dipanker University of Science &

			<p>Tech.(ADUST), Bangladesh Islamic University (BIU) Dhaka, Bangladesh University (BU) Dhaka, Bangladesh University of Business & Technology, BGC Trust University (BGCTU) Bangladesh, Chittagong Veterinary and Animal Sci. Univ., Comilla University, Darul Ihsan University (DIU), Dhaka International University, East Delta University (EDU), Eastern University (EU), Green University of Bangladesh (GUB), Hajee Mohammad Danesh Univ of Sci. & Tech, IBAIS University (IBAISU), Jatiya Kabi Kazi Nazrul Islam University, Leading University Sylhet, Manarat International University (MIU), Maulana Bhasanee University of Sci. & Tech., Metropolitan University (MU) Sylhet, Noakhali Scie. & Tech. Univ., Premer University, Presidency University (PU), Prime University (PU), Royal University of Dhaka (RUD) Dhaka, Shanta Marium University of Creative Technology, Southern University Bangladesh (SU) Chittagong, State University of Bangladesh (SUB), Sylhet Agricultural University, Sylhet International University, The Millenium University, The People's University of Bangladesh, University of Development Alternative (UDA), University of Information Technology & Sciences (UITs), University of South Asia (USA), Victoria University of Bangladesh (VUB) Dhaka,, Bangladesh University of Professionals, Jessore Science & Technology University, Sylhet Agriculture University, Asa University</p>
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Data collected by UGC, List prepared in November 2008

3. **AIF Allocation:** Tables 2, 3, and 4 summarize individual grant size (minimum and maximum) and allocation by round, window, and discipline for groups A, B, and C respectively.

Table 2: GROUP A - AIF Allocation and Individual Grant Size (min & max)

Rounds	Windows					
	Window 1: Teaching (40%) US\$ 12,000,000 Round #1. US\$ 4,200,000 Round #2. US\$ 7,800,000			Window 2: Research (40%) US\$ 12,000,000 Round #1. US\$ 4,200,000 Round #2. US\$ 7,800,000		Window 3: U-Wide (20%) US\$ 6,000,000 Round #1. US\$ 2,100,000 Round #2. US\$ 3,900,000
	Disciplines			Disciplines		
Round 1 (35%)	Hum & Soc (15%) US\$ 630,000 Min 30,000 Max 150,000	Sc & Tech (75%) US\$ 3,150,000 Min 100,000 Max 600,000	Self-Assess (10%) US\$ 420,000 Min 40,000 Max 80,000	Hum & Soc (15%) US\$ 630,000 Min 30,000 Max 150,000	Sc & Tech (85%) US\$ 3,570,000 Min 100,000 Max 600,000	(100%) US\$ 2,100,000 Min 100,000 Max 1,000,000
Round 2 (65%)	Hum & Soc (15%) US\$ 1,170,000 Min 30,000 Max 150,000	Sc & Tech (75%) US\$ 5,850,000 Min 100,000 Max 600,000	Self-Assess (10%) US\$ 780,000 Min 40,000 Max 80,000	Hum & Soc (15%) US\$ 1,170,000 Min 30,000 Max 150,000	Sc & Tech (85%) US\$ 6,630,000 Min 100,000 Max 600,000	(100%) US\$ 3,900,000 Min 100,000 Max 1,000,000

- 1) Group A Cap 60% of AIF: US\$ 30,000,000
- 2) Cap for Private Universities: 20% of AIF Round - US\$ 6,000,000
- 3) Institutional Cap (Allocation): 30% of AIF Round = Round #1: US\$ 3,150,000; Round #2: US\$ 5,850,000

Table 3: GROUP B - AIF Allocation and Individual Grant Size (min & max)

Rounds	Windows					
	Window 1: Teaching (40%) US\$ 6,000,000 Round #1. US\$ 2,100,000 Round #2. US\$ 3,900,000			Window 2: Research (40%) US\$ 6,000,000 Round #1. US\$ 2,100,000 Round #2. US\$ 3,900,000		Window 3: U-Wide (20%) US\$ 3,000,000 Round #1. US\$ 1,050,000 Round #2. US\$ 1,950,000
	Disciplines			Disciplines		
Round 1 (35%)	Hum & Soc (15%) US\$ 315,000 Min 30,000 Max 150,000	Sc & Tech (75%) US\$ 1,575,000 Min 100,000 Max 600,000	Self-Assess (10%) US\$ 210,000 Min 40,000 Max 80,000	Hum & Soc (15%) US\$ 315,000 Min 30,000 Max 150,000	Sc & Tech (85%) US\$ 1,785,000 Min 100,000 Max 600,000	(100%) US\$ 1,050,000 Min 100,000 Max 1,000,000
Round 2 (65%)	Hum & Soc (15%) US\$ 585,000 Min 30,000 Max 150,000	Sc & Tech (75%) US\$ 2,925,000 Min 100,000 Max 600,000	Self-Assess (10%) US\$ 390,000 Min 40,000 Max 80,000	Hum & Soc (15%) US\$ 585,000 Min 30,000 Max 150,000	Sc & Tech (85%) US\$ 3,315,000 Min 100,000 Max 600,000	(100%) US\$ 1,950,000 Min 100,000 Max 1,000,000

- 1) Group B Cap 30% of AIF: US\$ 15,000,000
- 2) Cap for Private Universities: 20% of AIF Round - US\$ 3,000,000
- 3) Institutional Cap (Allocation): 30% of AIF Round = Round #1: US\$ 1,575,000; Round #2: US\$ 2,925,000

Table 4: GROUP C - AIF Allocation and Individual Grant Size (min & max)

Rounds	Windows					
	Window 1: Teaching (40%) US\$ 2,000,000 Round #1. US\$ 700,000 Round #2. US\$ 1,300,000			Window 2: Research (40%) US\$ 2,000,000 Round #1. US\$ 700,000 Round #2. US\$ 1,300,000		Window 3: U-Wide (20%) US\$ 1,000,000 Round #1. US\$ 350,000 Round #2. US\$ 650,000
	Disciplines			Disciplines		
Round 1 (35%)	Hum & Soc (15%) US\$ 105,000 Min 30,000 Max 105,000	Sc & Tech (75%) US\$ 525,000 Min 100,000 Max 525,000	Self-Assess (10%) US\$ 70,000 Min 40,000 Max 70,000	Hum & Soc (15%) US\$ 105,000 Min 30,000 Max 105,000	Sc & Tech (85%) US\$ 595,000 Min 100,000 Max 595,000	(100%) US\$ 350,000 Min 100,000 Max 350,000
Round 2 (65%)	Hum & Soc (15%) US\$ 195,000 Min 30,000 Max 150,000	Sc & Tech (75%) US\$ 975,000 Min 100,000 Max 600,000	Self-Assess (10%) US\$ 130,000 Min 40,000 Max 80,000	Hum & Soc (15%) US\$ 195,000 Min 30,000 Max 150,000	Sc & Tech (85%) US\$ 1,105,000 Min 100,000 Max 600,000	(100%) US\$ 650,000 Min 100,000 Max 650,000

- 1) Group C Cap 10% of AIF: US\$ 5,000,000
- 2) Cap for Private Universities: 20% of AIF Round - US\$ 1,000,000
- 3) Institutional Cap (Allocation): 30% of AIF Round = Round #1: US\$ 525,000; Round #2: US\$ 975,000

4. Some examples of eligible activities to be funded by the AIF:

Teaching and Learning

- Academic staff development (local PhD studies, post-doctoral studies abroad, study visits abroad while in thesis) and professional development of research support personnel in support of teaching and research activities;
- Innovations in teaching-learning (active student learning, problem-based learning, integration of ITs);
- Modernization of laboratories (new technologies, ITs, simulation, integration of different disciplines);
- Modernization of curricula (flexible designs and student-centered) with emphasis on learning outcomes and competencies, feedback from stakeholders, student mobility, and international collaboration;
- Formulation of innovative academic programs that would enhance the skills of the graduates in latest scientific knowledge and technologies, meet the demands of the labor market and increase the employability of graduates;
- Modernization and refurbishing of student spaces (lecture and study rooms, laboratories, services); and
- Self-assessment exercise (self-study, external peer review, diagnostic reports and suggestions and recommendations) for undergraduate and post-graduate programs, and for departments.

Research

- High quality fundamental research (where knowledge, information, special techniques and instruments are fundamental);
- Formulation of innovative research designs oriented towards increasing productivity and innovation in the Bangladeshi industries;
- Institutional central instrumentation units (for expensive equipment, techniques, services and specialized support staff);
- Support to local PhD programs (academic staff, visitors, knowledge and information access, student short visits abroad while in thesis, instrumentation, scholarships);
- Improving linkages with the industry/productive sector (thesis in industry, collaboration with industry);
- Networking (joint PhD programs, associative research, joint research programs with national and foreign universities and research organizations);
- Invitations to post doctorate fellows, eminent academicians and scholars to offer courses and participating in research programs; and
- Development and/or improvement of the laboratories and workshops with state-of-the-art scientific instruments and equipment with the aim to conduct innovative teaching and experiments.

University-wide Activities

- Library improvement (computer access and ITs, student study rooms, automation, more books and journals, access to databases, e-library subscription)³⁸;

³⁸ Demand for these activities is expected to be boosted by the progressive availability of the BDREN.

- IT infrastructure development and modernization (university wide Local Area Network – LAN, Internet broad-band access, student computer rooms with full Internet access, e-learning and e-journal integration to learning and research, integration of university networks and libraries); and
- Scientific equipment needed at university level.

II. Detailed Descriptions of AIF Training and Workshops (sub-component 2.2)

5. In order to strengthen institutional capacity for preparation and evaluation of AIF proposals and implementation and management of AIF sub-projects, UGC AIF Secretariat (UGCAIFS) will organize three sets of training on AIF for all AIF eligible public and private universities: (i) proposal writing; (ii) proposal evaluation; and (iii) sub-project implementation and management. Training materials have been prepared based on the Operations Manual by the UGC with the support of Technical Assistance during the project preparation. These training will be provided by the selected trainers (TORs for the trainers are available in the Project Implementation Manual) with the involvement of appropriate staff of the HEQEPU (i.e. Procurement, FM and M&E officers for the AIF implementation and management training). Two rounds of training will be provided for each type of training during the project implementation period.

Table 5: AIF Training for Eligible Public and Private Universities

Training	Target	Duration and timing	Trainers
(i) Proposal writing (at central level and at each university)	(central) <ul style="list-style-type: none"> • Interested University AIF Secretariats (UAIFSs) and experienced academics (at each university) <ul style="list-style-type: none"> • UAIFS staff • University Screening Committee • Interested academics 	<ul style="list-style-type: none"> • 3 days • 2 months before the calls for proposal 	<ul style="list-style-type: none"> • Experienced academics • Training will be overseen by AIF experts
(ii) Proposal evaluation	<ul style="list-style-type: none"> • Area Review Panels • External evaluators 	<ul style="list-style-type: none"> • 3 days • 2 months before the proposal evaluation by the ARPs 	<ul style="list-style-type: none"> • Experienced academics/researchers • Training will be overseen by AIF experts
(iii) Sub-project implementation and management	<ul style="list-style-type: none"> • University AIF Secretariats (including procurement and FM staff) • Sub-project Directors 	<ul style="list-style-type: none"> • 3 days • Immediately after the AIF award announcement 	<ul style="list-style-type: none"> • UGC AIF Secretariat • HEQEPU Procurement & FM officers • HEQEPU M&E officers • AIF experts

(i) **Proposal writing training** will be provided to all potential AIF participating universities' University AIF Secretariats (UAIFSs) and academics. This training will be carried out first at the central level and subsequently at each university. Trainers for the central level training will be drawn from experienced academics who have extensive experience in proposal writing and implementation of innovative/complex projects. The overall training will be overseen by the AIF experts who have experience in implementing and managing the AIF. The contents of the training include: AIF concept and philosophy; compliance with the Operations Manual; proposal

templates/formats; proposal evaluation criteria; and proposal writing (objectives, performance indicators, work plan, budget, M&E plan). UGCAIFS staff's participation would be useful.

(ii) **Proposal evaluation training** will be targeted to experienced and well known academics in their respected fields who will constitute Area Review Panels and external evaluators. The contents of the training include: concept and philosophy of AIF; principles of proposal evaluation; evaluation procedures; evaluation criteria; proposal ranking, and mock evaluation exercise.

(iii) **Sub-project implementation and management training** will be provided to UAIFSs and managers of AIF sub-projects. The training will cover: management responsibilities; procurement and financial management rules to be followed (including preparation of procurement and financial plans); audit practice; monitoring and evaluation of sub-projects (use of performance indicators); and preparation of periodic reports.

6. In addition to the above training, a separate training will be provided to the UGCAIFS on AIF implementation and management. The first training will be provided immediately after the project effectiveness. The training will cover: concept and philosophy of AIF (i.e. focus on transparency and accountability); key roles and responsibilities of UGCAIFS (i.e. M&E, procurement, FM, and environmental management); coordination of AIF activities with universities; support/training for universities; monitoring of AIF implementation (reports, site visits, mid-term review, audits).

7. There will be separate workshops for the UGC Board of AIF to familiarize themselves with their roles and responsibilities in management and oversight of AIF, proposal evaluation and decision making.

8. UGC AIF Secretariat will also organize National Workshops on Academic Innovations to raise awareness on the specific topics and to share the best practice of AIF funded activities.

Annex 13: Documents in the Project File

BANGLADESH: Higher Education Quality Enhancement Project

A. BANK STAFF ASSESSMENTS

- Management Letter & Aide Memoire of appraisal mission, August 10-26, 2008.
Management Letter & Aide Memoire of pre-appraisal mission, April 15-27, 2008.
Management Letter & Aide Memoire of preparation missions, September 23-27 and November 18-22, 2007 & February 20 – March 6, 2008.
Management Letter & Aide Memoire of identification mission, July 10-23, 2007.
Management Letter & Aide Memoire of pre-identification mission, February 26 – March 2, 2007.
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———. Poverty in Bangladesh: Building on Progress, 2002.
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B. OTHER

- Government of Bangladesh. Bangladesh Economic Review 2008, Economic Advisor’s Wing, Finance Division, Ministry of Finance, 2008.
———. Medium Term Budget Framework 2005/06, 2006/07, 2007/08, 2008/09, 2009/10, 2010/11, Finance Division, Ministry of Finance.
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Jacob, Brian & Lefgren, Lars. The Impact of Research Grant Funding on Scientific Productivity, NBER Working Paper Series 13519, 2007.
Paci, P & Sasin, M. Making Work Pay in Bangladesh: Employment, Growth, and Poverty Reduction, The World Bank, 2008.
Patrinos, H.A., Ridao-Cano, C & Sakellariou, C. Estimating the Returns to Education: Accounting for Heterogeneity in Ability, World Bank Policy Research Working Paper 4040, 2006.
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———. Annual Report 2005, 2006.
———. Strategic Plan for Higher Education in Bangladesh 2006-2026, 2006.
———. Report of the Future Funding Gap, 2005.
William Saint. Innovation Funds for Higher Education: A User’s Guide for World Bank Funded Projects, 2006.

Annex 14: Statement of Loans and Credits
BANGLADESH: Higher Education Quality Enhancement Project

Project ID	FY	Purpose	Original Amount in US\$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P111272	2009	Emergency 2007 Cyclone Recovery & Rest Pr	0.00	109.00	0.00	0.00	0.00	103.12	0.00	0.00
P093988	2009	Dhaka Water Sup & San. Project	0.00	149.00	0.00	0.00	0.00	140.44	0.00	0.00
P095965	2009	Siddhirganj Peaking Power Project	0.00	350.00	0.00	0.00	0.00	327.71	0.00	0.00
P106332	2009	Disability and Children at Risk	0.00	35.00	0.00	0.00	0.00	35.50	0.00	0.00
P106161	2009	Secondary Educ Qlty & Access Enhancement	0.00	130.70	0.00	0.00	0.00	112.47	-9.39	0.00
P084078	2008	National Agricultural Technology Project	0.00	62.60	0.00	0.00	0.00	54.34	0.85	0.00
P098146	2008	Public Procurement Reform Project II	0.00	23.60	0.00	0.00	0.00	20.42	1.49	0.00
P040712	2008	Water Management Improvement Project	0.00	102.26	0.00	0.00	8.08	93.77	1.55	1.51
P102305	2007	Avian Flu Preparedness	0.00	16.00	0.00	0.00	0.00	15.29	0.76	0.00
P098273	2006	Local Governance Support Project	0.00	111.50	0.00	0.00	19.96	92.85	10.18	0.00
P089382	2006	Investment Promotion Financing Facility	0.00	50.00	0.00	0.00	0.00	24.00	-10.67	0.00
P074841	2005	HNP Sector Program	0.00	300.00	0.00	0.00	0.00	182.46	50.29	0.00
P086791	2004	Reaching Out of School Children Project	0.00	51.00	0.00	0.00	0.00	26.53	8.46	0.00
P086661	2004	BD - Water Supply Program Project	0.00	40.00	0.00	0.00	25.03	15.75	11.30	0.00
P083890	2004	Economic Management TA Program (EMTAP)	0.00	20.00	0.00	0.00	0.00	14.97	11.38	0.00
P081969	2004	Enterprise Growth & Bank Modernization	0.00	250.00	0.00	0.00	0.00	64.34	55.71	0.00
P078707	2004	Power Sector Development TA	0.00	15.50	0.00	0.00	0.00	11.35	10.86	10.86
P074966	2004	Primary Education Development Program II	0.00	150.00	0.00	0.00	0.00	63.65	17.63	0.00
P081849	2003	BD: Telecommunications Technical Assist.	0.00	9.12	0.00	0.00	0.00	4.23	3.51	3.16
P071435	2003	Rural Transport Improvement Project	0.00	210.00	0.00	0.00	0.00	92.89	48.23	-7.29
P053578	2003	Social Investment Program Project	0.00	101.24	0.00	0.00	0.00	80.14	-0.41	2.38
P062916	2003	Central Bank Strengthening Project	0.00	37.00	0.00	0.00	0.00	36.45	31.11	0.00
P071794	2002	Rural Elect. Renewable Energy Dev.	0.00	190.98	0.00	0.00	0.00	2.24	-37.46	-59.31
P044810	2001	Legal & Judicial Capacity Building	0.00	30.60	0.00	0.00	0.00	10.80	6.82	0.00
P059143	2001	Microfinance II	0.00	166.00	0.00	0.00	0.00	10.84	-13.59	-4.66
P041887	1999	Municipal Services	0.00	163.60	0.00	0.00	1.39	30.87	3.07	2.42
Total:			0.00	2,874.70	0.00	0.00	54.46	1,667.42	201.68	- 50.93

**BANGLADESH
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars**

FY Approval	Company	Committed				Disbursed			
		IFC				IFC			
		Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2001	BRAC Bank	0.00	1.63	0.00	0.00	0.00	1.60	0.00	0.00
1997	DBH	1.91	0.65	0.00	0.00	1.91	0.65	0.00	0.00
1991	Dynamic Textile	0.00	0.00	0.00	1.48	0.00	0.00	0.00	1.48
	GTFP Dhaka Bank	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
	GTFP Eastern Bnk	2.59	0.00	0.00	0.00	2.59	0.00	0.00	0.00
2004	GrameenPhone Ltd	24.00	0.00	0.00	0.00	24.00	0.00	0.00	0.00
2006	GrameenPhone Ltd	59.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	IPDC	3.13	0.00	0.00	0.00	3.13	0.00	0.00	0.00
1998	Khulna	10.40	0.00	0.00	11.99	10.40	0.00	0.00	11.99
1998	Lafarge/Surma	35.00	10.00	0.00	0.00	35.00	10.00	0.00	0.00
2000	Lafarge/Surma	0.00	0.00	0.00	15.00	0.00	0.00	0.00	15.00
2003	RAK Ceramics	7.20	0.00	0.00	0.00	7.20	0.00	0.00	0.00
2000	United Leasing	2.57	0.00	0.00	0.00	2.57	0.00	0.00	0.00
Total portfolio:		150.80	12.28	0.00	28.47	91.80	12.25	0.00	28.47

FY Approval	Company	Approvals Pending Commitment			
		Loan	Equity	Quasi	Partic.
2000	USPCL	0.00	0.00	0.00	0.00
1998	Khulna	0.00	0.00	0.00	0.00
Total pending commitment:		0.00	0.00	0.00	0.00

Annex 15: Country at a Glance

BANGLADESH: Higher Education Quality Enhancement Project

POVERTY and SOCIAL

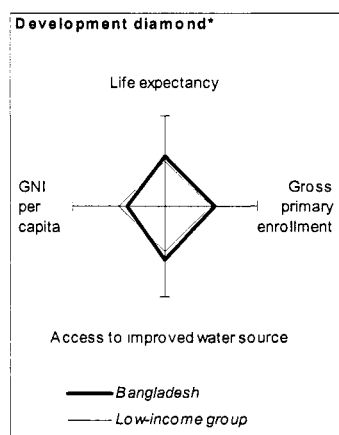
	Bangladesh	South Asia	Low-income
2007			
Population, mid-year (millions)	158.6	1,520	1,296
GNI per capita (Atlas method, US\$)	470	880	578
GNI (Atlas method, US\$ billions)	75.0	1,339	749

Average annual growth, 2001-07

	Bangladesh	South Asia	Low-income
Population (%)	18	16	2.2
Labor force (%)	2.1	2.1	2.7

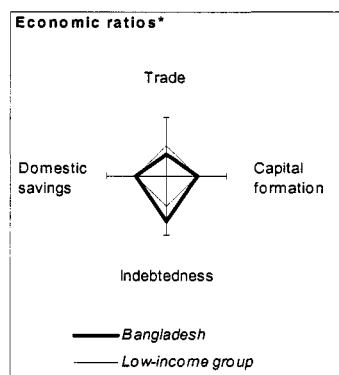
Most recent estimate (latest year available, 2001-07)

	Bangladesh	South Asia	Low-income
Poverty (% of population below national poverty line)
Urban population (% of total population)	27	29	32
Life expectancy at birth (years)	64	64	57
Infant mortality (per 1,000 live births)	52	62	85
Child malnutrition (% of children under 5)	39	41	29
Access to an improved water source (% of population)	80	87	68
Literacy (% of population age 15+)	47	58	61
Gross primary enrollment (% of school-age population)	103	108	94
Male	101	111	100
Female	105	104	89



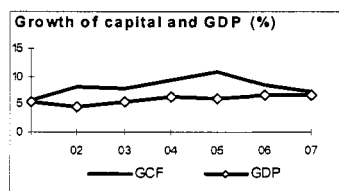
KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1987	1997	2006	2007	
GDP (US\$ billions)	23.8	42.3	619	67.7	
Gross capital formation/GDP	16.0	20.7	24.7	24.3	
Exports of goods and services/GDP	5.2	12.0	19.0	22.0	
Gross domestic savings/GDP	9.1	14.7	18.4	17.4	
Gross national savings/GDP	14.6	22.4	33.7	35.1	
Current account balance/GDP	-4.1	-2.0	13	14	
Interest payments/GDP	0.6	0.4	0.3	..	
Total debt/GDP	417	34.1	332	..	
Total debt service/exports	26.8	10.5	4.1	..	
Present value of debt/GDP	22.8	..	
Present value of debt/exports	84.5	..	
	1987-97	1997-07	2006	2007	2007-11
(average annual growth)					
GDP	4.4	5.6	6.6	6.5	6.3
GDP per capita	2.1	3.6	4.8	4.8	5.5
Exports of goods and services	12.8	112	25.8	27.0	116



STRUCTURE of the ECONOMY

	1987	1997	2006	2007
(% of GDP)				
Agriculture	32.4	25.8	19.6	18.9
Industry	20.8	25.1	27.9	28.5
Manufacturing	13.3	15.6	17.2	17.9
Services	46.8	49.1	52.5	52.6
Household final consumption expenditure	86.6	80.9	76.1	77.0
General govt final consumption expenditure	4.3	4.4	5.5	5.6
Imports of goods and services	12.1	18.0	25.2	28.9



	1987-97	1997-07	2006	2007
(average annual growth)				
Agriculture	2.5	3.4	4.9	3.2
Industry	6.8	7.4	9.7	9.5
Manufacturing	7.0	6.9	10.8	11.2
Services	3.9	5.7	6.4	6.7
Household final consumption expenditure	3.2	3.9	4.6	5.6
General govt final consumption expenditure	4.1	8.6	6.0	6.4
Gross capital formation	7.1	8.4	8.3	7.2
Imports of goods and services	8.3	8.0	18.2	23.6



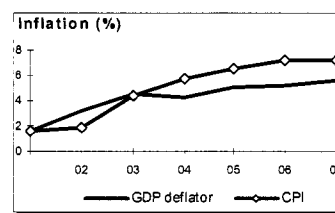
Note: 2007 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

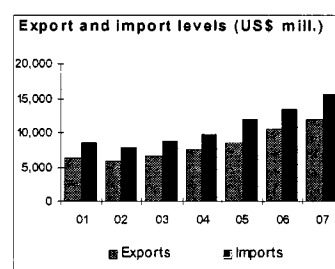
PRICES and GOVERNMENT FINANCE

	1987	1997	2006	2007
Domestic prices (% change)				
Consumer prices	..	2.5	7.2	7.2
Implicit GDP deflator	10.9	3.1	5.2	5.6
Government finance (% of GDP, includes current grants)				
Current revenue	8.6	9.2	10.7	10.6
Current budget balance	2.9	2.3	2.2	1.5
Overall surplus/deficit	-3.9	-4.3	-3.3	-3.1



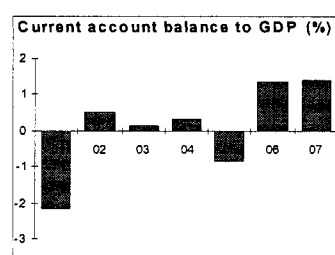
TRADE

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Total exports (fob)	1,074	4,334	10,412	12,053
Raw jute	104	116	148	147
Leather and leather products	135	222	257	266
Manufactures	669	3,637	9,535	11,118
Total imports (cif)	2,620	6,447	13,301	15,511
Food	413	184	1,372	1,918
Fuel and energy	230	515	2,004	2,233
Capital goods	856	1,937	1,458	1,929
Export price index (2000=100)	50	86	122	132
Import price index (2000=100)	51	84	141	153
Terms of trade (2000=100)	97	102	87	86



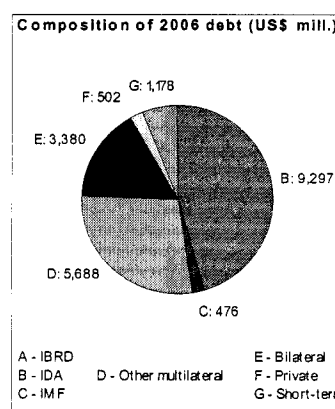
BALANCE of PAYMENTS

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Exports of goods and services	1,301	4,991	11,752	13,537
Imports of goods and services	2,876	7,656	16,664	18,256
Resource balance	-1,576	-2,665	-3,912	-4,719
Net income	-122	-107	-702	-883
Net current transfers	731	1,907	5,438	6,554
Current account balance	-966	-865	824	952
Financing items (net)	1,169	696	-486	360
Changes in net reserves	-203	169	-338	-132
Memo:				
Reserves including gold (US\$ millions)	..	1,671	2,296	3,638
Conversion rate (DEC, local/US\$)	30.6	42.7	67.2	69.1



EXTERNAL DEBT and RESOURCE FLOWS

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Total debt outstanding and disbursed	9,914	14,424	20,521	..
IBRD	70	38	0	0
IDA	2,985	5,701	9,297	10,077
Total debt service	524	690	685	..
IBRD	5	7	0	0
IDA	35	96	242	265
Composition of net resource flows				
Official grants	710	579	907	..
Official creditors	755	264	553	..
Private creditors	2	-30	-24	..
Foreign direct investment (net inflows)	3	139	697	..
Portfolio equity (net inflows)	0	-10	31	..
World Bank program				
Commitments	400	460	264	580
Disbursements	341	301	398	602
Principal repayments	9	59	172	193
Net flows	332	242	226	408
Interest payments	30	44	70	72
Net transfers	301	197	165	336



Note: This table was produced from the Development Economics LDB database.

9/24/08

Annex 16: Map
BANGLADESH: Higher Education Quality Enhancement Project

BANGLADESH HIGHER EDUCATION QUALITY ENHANCEMENT PROJECT

- DISTRICT CAPITALS
- ⊙ DIVISION CAPITALS
- ⊕ NATIONAL CAPITAL

- RIVERS
- MAIN ROADS
- RAILROADS
- DISTRICT BOUNDARIES
- DIVISION BOUNDARIES
- INTERNATIONAL BOUNDARIES



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