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IMPLEMENTATION COMPLETION REPORT
(SCL-41930)

ON A

LOAN

IN THE AMOUNT OF US\$71.2 MILLION

TO THE REPUBLIC OF

INDONESIA

FOR A

Quality of Undergraduate Education Project

December 30, 2004

**Human Development Sector Unit
East Asia and Pacific Region**

CURRENCY EQUIVALENTS

(Exchange Rate Effective October 2004)

Currency Unit = Indonesia Rupiah (IDR)

IDR1.00 = US\$.000011

US\$ 1.00 = 9097.5 IDR

FISCAL YEAR

April 1 March 1

ABBREVIATIONS AND ACRONYMS

| | |
|----------|--|
| BAPPENAS | GOI National Planning Agency |
| BHE | Board of Higher Education |
| CPCU | Central Project Coordinating Unit |
| DIK | Routine Budget (Recurrent) |
| DIKS | Supplementary Routine Budget (Recurrent) |
| DIP | Development Budget (Capital) |
| DRK | Self-generated Income |
| DSC | Discipline Service Center |
| DGHE | Directorate General of Higher Education |
| DUE | Developing Undergraduate Education (ID 4043-IND) |
| GOI | Government of Indonesia |
| GPA | Grade Point Average |
| IDR | Indonesian Rupiah |
| IRQUE | Increasing Relevance & Quality of Undergraduate Educ (ID 50741-SRI) |
| LPIU | Local Implementation Unit |
| MOE | Ministry of Education and Culture |
| MOF | Ministry of Finance |
| QUE | Quality of Undergraduate Education (ID 4193-IND) |
| Skripsi | Senior undergraduate thesis – capstone exercise required for university graduation |
| UI | University of Indonesia |
| UMPTN | National University Entrance Exam |
| WBOJ | World Bank Country Office Indonesia (Jakarta) |

| | |
|--------------------------------|--|
| Vice President: | Jemal-ud-din Kassum |
| Country Director | Andrew D. Steer |
| Sector Manager/Director | Christopher Thomas/Emmanuel Y. Jimenez |
| Task Team Leader/Task Manager: | Richard Hopper |

INDONESIA
Quality of Undergraduate Education

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|---------------------------------------|---|
| <i>Project ID:</i> P040195 | <i>Project Name:</i> Quality of Undergraduate Education |
| <i>Team Leader:</i> Richard R. Hopper | <i>TL Unit:</i> HDNED |
| <i>ICR Type:</i> Core ICR | <i>Report Date:</i> December 30, 2004 |

1. Project Data

Name: Quality of Undergraduate Education *L/C/TF Number:* SCL-41930
Country/Department: INDONESIA *Region:* East Asia and Pacific Region

Sector/subsector: Tertiary education (88%); Central government administration (12%)
Theme: Education for the knowledge economy (P); Technology diffusion (S)

| KEY DATES | <i>Original</i> | <i>Revised/Actual</i> |
|------------------------------|------------------------------|-----------------------|
| <i>PCD:</i> 11/22/1996 | <i>Effective:</i> 09/24/1997 | 09/24/1997 |
| <i>Appraisal:</i> 03/13/1997 | <i>MTR:</i> 02/15/2001 | 02/03/2001 |
| <i>Approval:</i> 06/17/1997 | <i>Closing:</i> 03/31/2004 | 03/31/2004 |

Borrower/Implementing Agency: GOI/MOE
Other Partners:

| STAFF | Current | At Appraisal |
|---------------------------------|--|----------------------|
| <i>Vice President:</i> | Jemal-ud-din Kassum | Jean-Michel Severino |
| <i>Country Director:</i> | Andrew D. Steer | Dennis De Tray |
| <i>Sector Manager/Director:</i> | Emmanuel Y. Jimenez | Samuel S. Lieberman |
| <i>Team Leader at ICR:</i> | Richard R. Hopper | John Lincoln Newman |
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2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: S
Sustainability: L
Institutional Development Impact: SU
Bank Performance: S
Borrower Performance: S

QAG (if available) ICR

Quality at Entry: S

Project at Risk at Any Time: No

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

The project had two objectives: (a) to improve the quality of undergraduate study programs in national priority fields; and (b) to promote a more cost effective allocation of public funds by directing resources to high priority fields at both public and private universities.

3.2 Revised Objective:

The original objectives were not revised, although expectations were modified somewhat due to the cancellation of Component B.

3.3 Original Components:

Component A: Improving Quality through Competitive Grants to Undergraduate Study Programs in Public and Private Universities (\$94.8 million planned cost, \$66.31 actual expenditure)

Component B: Improve Discipline Service Centers through Direct Investment and Performance-Based Awards (\$10.0 million planned cost, \$0.22 actual expenditure). *In response to a request from the Finance Ministry of the GOI, this component was cancelled.*

Component C: Support to the CPCU (\$2.5 million planned cost, \$1.12 million actual expenditure)

3.4 Revised Components:

There were no revised Components.

3.5 Quality at Entry:

The project was not subject to assessment or rating for *Quality at Entry*.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

The overall achievement of the project objective is rated as *satisfactory*. This rating is impressive given the period of the project's implementation which was marked by severe and unanticipated national economic crises, political unrest, terrorist attacks, economic and social reactions to the spread of SARS in East Asia. During the entire project period, the implementation of the project was well planned, steady, and focused on meeting the stated objectives. .

Objective 1: To improve the quality of undergraduate study programs in national priority fields

Grants were awarded to 46 undergraduate study programs in national priority fields as planned; quality gains were achieved at all participating universities. These gains were indicated by: (a) improvements in beneficiary student final test scores over project baseline scores, and (b) improvements in beneficiary student final test scores over non-beneficiary student test scores by comparing matched samples

(students from project financed programs vs. students from like-study programs not funded by the project). Across the 46 grant-supported study programs, 68 percent of the undergraduate university students showed a moderate to substantial (greater than five percent) increase in their final over baseline scores, while 28 percent of were at about the same level (as the baseline), and 4 percent fell below. In all cases of matched sample comparisons, grant recipients demonstrated higher average scores on primary indicators with smaller standard deviation and greater increases in final over baseline scores than nonrecipients. However, consolidated data on the attainment of project performance indicators revealed that achievement as measured against these targets was modest.

At project completion, about 50 percent of the grant recipients met three of the four primary performance targets. Although 27 percent of preliminary applications received were from private institutions, no private programs were selected for final awards. This situation may have been due to the lack of willingness by the Directorate General of Higher Education (DGHE) and grant proposal review panelists to channel public funds into the private higher education sector, or to the severe budget constraints caused by the economic crisis. It should be noted that as the Indonesian economy regained momentum, the DGHE independently introduced several competitive grant programs modeled on those funded by the QUE Project. In one of the new, fully GOI-funded schemes, 67 of the 122 grants awarded (55 percent) went to private higher education institutions. Though outside of the project, this DGHE initiative demonstrates the current willingness of the DGHE and review committees to make public awards to private institutions for educational improvement in national priority fields, and it shows some GOI commitment to the sustainability of competitive funding schemes to support improvements in higher education.

Objective 2: To promote a more cost effective allocation of public funds by directing resources to high priority fields at both public and private universities

The QUE Project made a substantial contribution to institutional change in the higher education sector of Indonesia. This contribution was found at both the institutional (university program) level, and within the DGHE where it promoted a more cost effective and transparent allocation of public funds within the sector.

National competitive financing procedures for public funds were a primary focus of both this project (QUE) and an earlier project, (*Development of University Education - DUE*). This initiative was strongly supported by the academic community; they welcomed a more equitable allocation of public resources for higher education as well as greater public scrutiny over the distribution and use of such funds. The implementation of these financing mechanisms have substantially increased the percentage of the higher education development budget awarded to institutions. Furthermore, it is commonly agreed that the cost effectiveness of these allocations are significantly enhanced through open competition rather than traditional “negotiated” or “historic” line-item budgeting methods. This marks a major shift in public higher education finance from the early 1990s when less than 2 percent of the annual development budget for public universities was allocated on a competitive basis. This is seen clearly in FY2003-2004, when approximately 30 percent of public university budget allocations were awarded competitively. This is double the project's performance target of 15 percent. The DGHE adoption of these reforms may be further seen in the widespread application of the competitive grant scheme for myriad purposes. These schemes were - and remain at the time of this report - financed with public funds and the administration of such schemes is based on the lessons learned through the implementation of the DUE and QUE projects.

4.2 Outputs by components:

Component A: Improving Quality through Competitive Grants to Undergraduate Study Programs in Public and Private Universities. The overall achievement of the Component A is rated as *satisfactory*.

- **Staff Development.** This project contributed substantially to university staff development by funding more than 180 overseas postgraduate study opportunities, and more than 600 staff to attend and present papers at international conferences. Targets for these overseas staff development initiatives were exceeded (by 5 percent and 15 percent respectively), while expenditures were lower than budgeted (5 percent to 10 percent) indicating that funds were used more efficiently than anticipated. Bank supervision reports and university annual reports in the latter years of the project frequently cite qualitative gains through improved staff attendance, increased staff/student contact hours, and an increase in student participation in staff research. Such gains can be linked to research grants and teaching grants funded by the project, as well as expanded internet access to all students along with improved libraries and laboratories. Monitoring reports from the Board of Higher Education (BHE) and auxiliary data collected by many of grantees indicate that facilities were improved and the staff utilization rate of such facilities were generally good to high. This sub-component was rated as *satisfactory*.
- **Equipment.** This project provided over 17,300 units of equipment, thus exceeding the 16,500 units originally planned. Periodic BHE reports indicate that the introduction of this equipment has contributed to gains in internal efficiency. The BHE has also noted that there is a high level of institutional satisfaction with the equipment items provided. This suggests that the procurement specifications for these items were largely appropriate. This sub-component is rated as *satisfactory*.
- **Civil Works Rehabilitation.** The QUE project provided renovation and rehabilitation of over 28,000 square meters of classrooms, student facilities (such as student welfare offices and canteens), laboratories, libraries, computing centers (with connectivity to the internet), and staff/student meeting rooms. This figure exceeds project estimates by 3 percent. These renovations were aimed at improving student learning outcomes through the enhancement of learning facilities, which in turn allow for smaller class sizes, greater staff/student interaction, computer and internet access for all students, along with improved conditions in libraries and laboratories. BHE reports and data collected by many of grantees indicate that the renovated facilities are adequately designed and that the utilization rate of these facilities by students and faculty is good to high. This sub-component is rated as *satisfactory*.
- **Technical Assistance.** Both project expenditures for foreign technical assistance and the frequency/duration of services fell about 10 percent below levels forecast during project preparation. Such a shortfall appears to be the result of factors outside of the control of the project: frequent travel restrictions were imposed on foreign technical specialists due to multiple health and security advisories making it difficult to procure some of the anticipated technical assistance. There were nevertheless positive outcomes. These include: (a) a number of strong linkages formed with overseas experts, (b) curricula and teaching methods modified to incorporate international best practices, and (c) university staff training in the utilization of laboratory equipment and in research techniques - with some of this training focused on ways to involve students in research activities.

Domestic technical assistance figures were also less than forecast, about 2 percent below anticipated targets. A factor contributing to this minor shortfall was the project's application of a stringent conflict-of-interest policy which prohibited the involvement of academic staff associated with a grant-recipient university from providing technical assistance; this caused difficulty in securing staff

with appropriate experience and seniority from outside the 11 premier universities receiving the grants. This sub-component is rated as *satisfactory*.

- **Library Materials.** The project supported the acquisition of about 27,000 text and journal titles to university holdings of grant-winning institutions. These investments exceeded planned targets by about 12 percent. During the procurement process, efficiencies were realized as staff were given access to the internet; such access allowed staff to search for the availability of current editions and publications - an innovation which facilitated the ordering process. Data collected by most universities indicated that there was an increase in student utilization of library facilities during the life of the project. The task team also interviewed students during supervision missions and found that almost all interviewed students reported increased access to academic texts and journals - and many attributed enhanced access to the reduction of time necessary for each student to complete the required *Skripsi* (the final research paper required for an S1 degree), and this could be associated with a reduction in the students' average time to degree. This sub-component is rated as *satisfactory*.
- **Curriculum Development.** Grant-winning study programs were allowed to on-grant funds in four areas to support curriculum development. These included: (a) teaching/lecture note grants, (b) project grants, (c) research grants, and (d) policy grants. During the second year of project implementation the DGHE eased requirements for nationally centralized curricula to give greater freedom to individual universities in determining the content of academic programs for key disciplines. Centralized core curricular requirements were consequently minimized thereby shifting the curriculum focus more toward to local content. Such a shift offered significant opportunities for the project to support curriculum changes in all of the participating universities.

Lessons learned from the policy, project and research grants helped the DGHE to revise the requirements for *Skripsi* and laboratory practica. Teaching grants had an impact on the way in which subjects were taught, enhancing student participation through the introduction of student-centered learning methodologies which gradually replaced traditional passive learning. These changes supported improvements in the pedagogy of than 400 subjects in the QUE-supported universities. Lesson note grants supported development of learning materials for more than 200 subjects, increasing the amount of written learning materials available to students for subjects which had previously relied exclusively on lectures and note-taking.

About 90 percent of the planned number of sub-grants were awarded. Initially, the applicant-to-award ratio was set at 3-to-1 in the selection process, but this became too restrictive and grant disbursement in these categories had been initially somewhat slow. In the latter stages of project implementation, in consultation with Bank review missions, the applicant-to-award ratio was relaxed after a proposal review indicated quality would not be compromised by such a modification in selection procedures. This sub-component is rated as *satisfactory*.

- **Project Management.** Management services were provided by the Local Project Implementation Units (LPIUs) located within the respective grant-winning academic departments of the recipient universities. During project implementation the strongest LPIUs disseminated and openly shared lessons learned in organization, management and planning with other LPIUs. Procurement and financial reporting were problematic in the early stages of the project as the LPIUs were staffed with academics who lacked the necessary administrative skills and experience to manage such large operations. As the project progressed, regular workshops were offered by the Central Project Coordinating Unit (CPCU) and the Indonesia World Bank Country Office in Jakarta (WBOJ). During these workshops, better coordination was developed between the LPIUs and the CPCU and implementation issues were

clarified, discussed and effectively addressed by both parties. This resulted in improvements in project implementation. These improvements were documented in the independent technical and financial audits which, in the latter stages of project implementation identified fewer qualifications and comments on procurement and financial performance than in any other project (across all sectors) in the Bank's portfolio of Indonesia projects. This sub-component is rated as *satisfactory*.

- ***BHE Process for Proposal Review and Selection.*** The BHE scheme for the selection of grantees – from a review of pre-proposals, to full-proposals, to site visits, to grant award - has become so effective that it is now the procedural model used internally by the DGHE for the allocation of its own development budget. The process continues to leverage the capacity built within the CPCU and the LIPUs to implement new GOI-sponsored competitive grant schemes. The national and international peer review process also applied best practice conflict-of-interest policies which are regarded by the local academic community as being fair and transparent. The Indonesian model of competitive funding for higher education financing has received international recognition. The Government of Sri Lanka has engaged Indonesian experts to help that country develop the capacity to implement similar competitive grants through a World Bank-sponsored project (IRQUE). This subcomponent is rated as *highly satisfactory*.
- ***Proposal Preparation Workshops.*** In order to encourage high-quality proposals for the various grants available through the project, proposal preparation workshops were held by the BHE and CPCU. Workshop instructional materials prepared by BHE and the CPCU were comprehensive and provided clear guidelines, reporting templates, and a comprehensive explanation of the proposal review process. The preparation phase for the latter two rounds of competition were well attended with workshops were held centrally and regionally. The number and high-quality of proposals received across all three rounds of competition are evidence of effective preparation workshops. The workshops are rated *highly satisfactory*.

Component B: Improve Discipline Service Centers through Direct Investment and Performance-Based Awards

Component B was designed to improve Discipline Support Centers (DSCs) established in 8 universities with the assistance of two earlier World Bank projects (HEDP I and II). These DSCs were intended to provide a centralized holding of library materials for 12 science disciplines. The component was to be implemented in two stages: (1) installation of computing facilities and internet connectivity to make DSC materials more accessible through the introduction of on-line service, and (2) DSC service expansion of the first phase initiatives.

The GOI decision to reduce the country's overall foreign borrowing occurred prior to the implementation of the second stage of this component. As a result, a substantial amount of the loan allocation for this component was cancelled (of the US\$7.10 million loan funds allocated for this component, US\$6.92 million of the loan was canceled and only US\$0.18 of the loan allocated for this component was spent.) Prior to the cancellation of the component, computing facilities and internet connections were established in the eight target universities. The impact of these investments was not assessed during the project or afterwards. Since the majority of the planned investments were not made, the component is likely to have a negligible impact of the sector, however, since the GOI decided to cancel the remainder (and majority) of the component, from an implementation perspective, the rating must be considered *satisfactory*.

Component C: Support to the CPCU

The CPCU served as an overall coordinating body for the project and in this role provided a link of communication among the DGHE, BHE, LPIUs and the Bank. The CPCU also followed through on recommendations from Bank supervision missions, frequently conducting workshops and seminars immediately after supervision to ensure a wider and more rapid dissemination of important information and lessons learned to all grantees rather than only to those institutions which were directly supervised during Bank site visits. From 2000 the CPCU began a regular review of LPIU draft procurement plans; such a monitoring role provided an early detection point for possible procurement problems, and as vital implementation support to the LPIUs. The unique expertise and capacity developed by CPCU is highly valued within the DGHE and the BHE; as a result, CPCU staff now assist in the planning and development of similar competitive grant schemes within the sector. The capacity developed within the CPCU helped to inform both policy debate and subsequent reforms in the higher education sector. The overall achievement of the Component C, is rated as *highly satisfactory*.

4.3 Net Present Value/Economic rate of return:

Not Applicable

4.4 Financial rate of return:

Not Applicable

4.5 Institutional development impact:

The QUE Project has had a significant impact on institutional development on two levels: (1) at the university department level where there have been significant inputs to improve instructional quality, and (2) within the DGHE where institutional development is clearly evidenced by the wholesale internalization of competitive funding mechanisms for higher education finance in Indonesia – using the same implementation methodology pioneered by QUE. Such a continued insistence on competitive funding for higher education in Indonesia has fundamentally changed the way in which the DGHE allocates the development budget to universities. The DGHE has requested other donors to familiarize themselves with proposal selection process of the QUE Project, and to build competitive funding mechanisms into the design of their development support, as was seen with the recent Asian Development Bank (ADB) project in higher education. This ADB project has adopted similar competitive procedures, and has built its project on the foundation of implementation capacity that was established to support the DUE and QUE projects.

The QUE Project is widely viewed as a contribution to the of the broader DGHE effort to fully implement the ongoing 10-year development plan known as the *Higher Education Long-Term Strategy (HELTS)*. The DGHE has drawn and continues to draw heavily on young academics who have gained implementation experience from participation the QUE Project. Many of these academics will continue to contribute to overall DGHE policy and strategy development. At the university level, the core principle of *autonomy with accountability*, which was central to the QUE Project, has been extended beyond the recipient university study programs to other departments and faculties. In all universities, it is now common to find project outcomes put to use. For example, teaching and research grants are now commonly used as a means of staff development and improving the teaching/learning environment, and a number of universities have developed their own competitive funding programs (e.g. University of Indonesia). With the move to decentralize the Government budget process, regional governments have also become an increasing source of funding for higher education. In Lampung (South Sumatra), for instance, the regional government has adopted the competitive funding mechanisms from the QUE Project as the way to determine disbursement of its entire IDR4 billion annual budget for higher education.

When one looks at the proliferation of competitive grant programs in higher education, it seems appropriate to question the potential risk that may be associated with such expansion. To date, the DGHE has found that the use of competitive grants has many more positive than negative consequences. The quality of program designs and subsequent implementation has improved. There is more clarity and fairness in the appropriation of funding. The cost effectiveness of service delivery has improved and, thanks to these improvements, it is now easier to justify requests for increased funding when necessary. The institutional impact is rated as *satisfactory*.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

The onset of the Asian Economic Crisis roughly coincided with project effectiveness and combined with the turbulent political transition following the fall of the Suharto regime in the first year of implementation. This situation significantly reduced economic growth across all sectors. The construction industry was particularly hard hit and, as a result, employment rates for many types of engineering graduates went down. Such severe economic vagaries influenced some of the best and brightest high school graduates to consider alternatives to engineering as their first career choice discipline. Only in the final years of the project did the industry begin showing signs of recovery.

Engineering was one of the GOI/DGHE national priority disciplines supported by the QUE project. Therefore, the economic climate adversely affected the outcomes of the project where it negatively influenced two of the primary performance indicators: (a) *UMPTN scores* (which as a performance indicator of program effectiveness), and (b) *waiting time to first employment*.

Further economic and political uncertainty in 1998 and 1999, and subsequent national and international security concerns created unforeseen and lingering difficulties in attracting foreign technical assistance to Indonesia. Despite these rather dramatic events and influences, the implementation of the project remained generally on course. Where problems arose the Borrower and the Bank worked collaboratively to move the project ahead.

5.2 Factors generally subject to government control:

The DGHE and the BHE recognized the potential impact of competitive funding on both educational quality and institutional development. Therefore they strongly supported the continued implementation of the project despite national budgetary pressures to cut project components and activities. This unwavering commitment throughout QUE implementation was an important to the project's success. The DGHE and the BHE also recommended that the GOI enact legislation to give universities more autonomy. With the passage of this new legislation, significant institutional change has become a realistic option in higher education. This situation provided an environment within which the project was able to achieve a wider impact than originally had been envisioned.

5.3 Factors generally subject to implementing agency control:

Throughout the life of the project the DGHE provided strong counterpart support. Highly competent staff were assigned to work in the project at all levels. This commitment provided the project with the manpower to effectively meet its objectives. The DGHE also supported the use of the project to train and give experience to young, carefully selected professionals so that human resources capacity would be built for the long term in higher education. These young professionals have already begun to serve as the foundation of expertise used to plan and implement other competitive funding schemes within the

Ministry, the GOI and, as mentioned previously, in other countries. The DGHE also ensured that adequate counterpart funding was available as needed and consequently, expanded its own budget to allow for the introduction of several other competitive grant finance programs modeled on the successes pioneered by this particular World Bank project.

5.4 Costs and financing:

The project became effective on September 24, 1997, with overall project costs estimated at US\$109.1 million. Of this amount, the Bank was to provide US\$71.2 million in loan financing and the GOI was to provide US\$37.9 million (equivalent) in counterpart funding. On August 26, 1998 the GOI canceled US\$9.89 million of the loan as part of its national priority to reduce Indonesia's overall debt burden due to the Asian Economic Crisis. This action reduced the available loan funds for the project to \$61.31 million. The actual Bank loan disbursement was US\$55.73 million. The project closed on March 30, 2004 with an undisbursed loan balance of US\$5.58 million. The actual GOI financing disbursed for the project was US\$11.92 million. This made for a total actual project cost (loan plus counterpart disbursements) of US\$67.65 million (out of the originally estimated US\$109.1 million)

6. Sustainability

6.1 Rationale for sustainability rating:

Long-term sustainability of many institutional changes introduced by the project is *likely*. Although the short- to medium-term sustainability of the project supported study programs also seem likely, there is some concern about the institutions' lack of capacity to replace depreciated equipment when necessary. In these programs, the project design addressed sustainability by introducing selection criteria which tied the size of grants to a demonstrated ability, by the selected universities, to absorb the investments and maintain them. The design also allowed staff who were to be the end-users to be directly involved in the procurement process, an element which both BHE and Bank mission reports identified as facilitating a greater sense of "ownership", which in turn, contributed to the likelihood of program sustainability. Moreover, the financial management and procurement capacity of the LPIUs remains intact and continues to function within the each recipient university, providing continued transparency and accountability for funds, and in many instances, serving as an example for the organizational behavior within other university departments. During project implementation deposits to a matching fund were required. These deposits were drawn from each recipient university's self-generated income (DRK) fund. The matching fund was required as a trigger for subsequent tranche disbursement from the loan. This ensured an ongoing commitment to the maintenance and operation of investments and it demonstrated a financial capacity by each university to support the target programs. In the closing stages of the project, the DGHE issued a circular requesting university rectors to continue their institutional commitment of self-generated university revenue towards the operation and maintenance costs of the project investments at their university. The circular further recommended that a skeleton staff of the LPIU be retained within each university to provide continued direct oversight of the project investments. The project investments themselves added a further dimension to the likelihood of sustainability as they increased the recipient study programs' capacity to raise self-generated income.

While these amounts are likely to be sufficient for operation and maintenance of the university programs, they are not likely to be sufficient to cover the depreciation and replacement costs of the equipment provided through the project. This concern is particularly important for computer hardware and software that has a high depreciation and obsolescence rate. The DGHE has yet to prepare a consolidated national action plan and at the time of this report only a limited number of universities had prepared such plans.

There is a concern about the long-term sustainability as depreciation takes its toll on the equipment and when emerging technologies force the programs to upgrade their equipment to support curriculum enhancements.

6.2 Transition arrangement to regular operations:

The DGHE has made a decision to convert project innovations to regular operations within each of the grant-winning institutions. To do this, the DGHE has initiated a number of national programs modeled after the DUE and QUE project supported programs. All of these programs are funded from the DGHE's development budget. The DGHE also made a commitment in its 10-year higher education development plan to continue expanding competitive and performance-based budgeting. The plan sets the target for competitive public funding of universities to reach 50 percent of the public budget allocation for these institutions. The precise mechanisms to be employed are still in under consideration. Associated with this effort, the DGHE is currently implementing a four-tiered program of competitive funding. The DGHE's *A1 Competitive Grant Program* awards 150 two-year grants annually. Each grant will be for about IDR250.0 million. The *A2 Competitive Grant Program* focuses on improving internal efficiency and awards 40 three-year grants annually, each of these grants is equal to IDR500.0 million. The new *A3 Competitive Grant Program* focuses on improving external efficiencies (improved market outcomes for graduates) and it awards 40 three-year grants annually, each worth about IDR800.0 million. Finally, the new *B Competitive Grant Program* focuses on promoting excellence and international competitiveness and awards 4 three-year grants annually, each worth about IDR1.5 billion. DGHE has also revamped the structure of BHE and regularized its operation; moreover the Directorate has taken the opportunity to incorporate the experience gained through implementation of the QUE Project by young academics from the LPIUs to assist DGHE national policy and strategy formulation.

7. Bank and Borrower Performance

Bank

7.1 Lending:

Overall the World Bank's lending performance is rated as *satisfactory*. The design of the QUE Project was closely linked to the major sector issues identified in the CAS. At the time of project identification the Borrower had initially sought a simple continuation of the format of the previous two World Bank loans for higher education - essentially a "third time slice." After some discussion, the Borrower and the Bank agreed to plan and implement an enhanced project design that would utilize international best practices in competitive financing of higher education. The identification mission was able to produce a comprehensive investment proposal that did not change much during the subsequent stages of project preparation and implementation. The project proved to be both suitable and responsive to GOI development strategy. Its design withstood much of the negative effects of the financial and security crisis discussed previously; its successful completion, along with the DGHE's immediate replication of its positive outcomes at a national level suggests that the project was well identified, prepared and implemented. This project clearly met the Borrower's need to strengthen the quality of public services and promote international competitiveness amongst the study programs at the strongest universities.

7.2 Supervision:

Overall the Bank's Supervision performance is rated as *satisfactory*. As planned, regular missions were conducted biannually throughout the life of the project, although there was some minor disruption in 1998 and 1999 due to the economic and political crises. Task management of the Project from the Country Office in the early years of implementation allowed for frequent informal dialog and meeting opportunities

with the DGHE as the implementation capacity was built and as the QUE project beneficiary programs were launched. These frequent opportunities for continued dialog with the higher education sector provided opportunities for the LPIU and Bank's task team to jointly address technical issues as they arose, rather than wait until they became outright problematic. This hands-on approach improved the overall implementation of the project.

The supervision missions were generally well staffed and drew on extensive implementation, higher education, procurement, economic and financial management experience. Bank supervision missions took a pro-active approach in coping with the lack of LPIU experience with Bank procurement guidelines. The missions provided technical assistance to the multiple LPIUs on many issues, and participated in workshops to strengthen LPIU capacity in those areas. The supervision team also conducted a comprehensive review of procurement plans at the start of each contract year. This approach was time consuming and involved a significant amount of correspondence between the Bank and the Borrower, yet was at times perceived as a contributing factor to procurement delays. The lack of serious procurement problems and the strong procurement capacity that was developed during the project is evidence that this pro-active approach was effective. Indeed, this strong procurement capacity still exists in both the CPCU and the LPIUs.

7.3 Overall Bank performance:

The overall Bank performance is rated as *satisfactory*. Adequate steps were taken to ensure continuity through four changes in task management and all supervision missions had at least one member who had been on the previous mission. Strong relationships were fostered with the implementing agencies in the 46 grant-winning study program sites throughout 11 universities, as well as with the CPCU and the BHE which contributed to a collaborative atmosphere of mutual problem solving.

Borrower

7.4 Preparation:

Overall preparation of the QUE Project by the Borrower was *highly satisfactory*. Manuals for proposal preparation, national and international peer review procedures were put in place for selection of grantees, and dissemination of information to prospective applicants mirrored international best practice. The DGHE assigned motivated and highly experienced staff to project preparation, and allocated substantial resources to publicize the impending project broadly throughout the academic community.

7.5 Government implementation performance:

Government performance during implementation was *satisfactory*. Despite budgetary pressures, counterpart funds at the requested levels were available in a timely manner. Although national priorities dictated partial cancellations of some elements of the QUE Project, such cancellations were not directed toward the project's central component of competitive block grants to university study programs.

7.6 Implementing Agency:

CPCU. The CPCU played a crucial role as the focal coordination point for the QUE Project, sitting between the LPIUs, BHE, DGHE and the World Bank. Overall the CPCU deftly balanced coordination, monitoring, support and capacity building for the 46 study programs while maintaining implementation autonomy of the grantees. The CPCU in collaboration with the World Bank Country Office in Indonesia organized procurement and financial management workshops and repeated these throughout

the life of the QUE Project to build capacity.

Several supervision missions did observe that while the CPCU collected adequate data and required annual reports from the LPIUs, it was not able to provide an adequate consolidated analysis of the disparate data and reports that were generated. Such an analysis would have provided a valuable perspective of trends across regions and across academic disciplines. The performance of the CPCU is rated as *highly satisfactory*.

LPIU. Procurement and financial management capacity were strengthened during the course of project implementation. Generally LPIUs were diligent in their collection of performance indicator data, but were less successful in demonstrating the analysis of that information, or in incorporating the findings into their decision-making process. All of the LPIUs were able to recruit a pool of young academics who were able to gain knowledge and experience while administering the QUE project grants. Many of these individuals then contributed to the DGHE medium- and long-term policy and strategic planning. Some of the QUE implementation staff have received international recognition for their experience in moving toward university autonomy, and developing financial accountability schemes. Overall implementation of the QUE-grants by the 46 LPIUs is rated as *satisfactory*.

BHE. The BHE established and implemented the grant selection process for the project. This process was well received by the participating institutions, as they viewed it to be fair, transparent, and important to the development objectives of their respective institutions. However, the BHE did not participate in the direct administration of grant awards. Instead, the BHE took on the crucial role of project monitoring and evaluation, while it continued to provide strategic and policy support to DGHE. For this reason, the performance of the BHE was rated as *highly satisfactory*.

7.7 Overall Borrower performance:

The QUE Project was a central piece of a broader agenda within higher education reform piloting innovations consistent with the “New Paradigm” and as such received strong and consistent support from the Borrower. The overall performance of the Borrower is rated as *satisfactory*.

8. Lessons Learned

Policy and Design Lessons:

- The mechanism of competitive funding for higher education can be effectively designed to have two positive benefits. The first benefit is accountability in the use of public funds: both the process of selecting grant winners and the process of grant administration are fully transparent with many checks. The second benefit is seen in the flexibility of the funding mechanism itself. The competitive funding mechanism can be adjusted at any time to better target the purpose of the grants and the eligibility criteria so that public funds to areas of national priority can be effectively delivered. Of course, the sustainability of the model requires strong government commitment to financing in this manner, strong capacity at the central and institutional levels, and careful construction of the competition process to make it sufficiently rigorous, yet accessible. Future World Bank projects should consider competitive funding as a financing mechanism not only to encourage transparency/accountability, but also to provide flexibility to the government to adjust priorities as needed.
- While the actual cash investment underlies impact on student achievement, the nature of how

investment funding flows to the higher education institution underlies institutional development and serves as an agent of change in organizational behavior. Future projects should pay as much attention to the way in which institutions receive their funding as to the selection of investments. The QUE project results suggest a “bottom-up” planning approach with the direct involvement of end-users (department heads, senior teaching faculty, etc.), would serve to enhance institutional autonomy while increasing accountability.

- The sustainability of institutional impact of competitive funding mechanisms in higher education are closely linked to financial management and procurement capacity at both the central level (CPCU) and at the study program level (LPIU). Such capacities should be recognized as a priority within each institution and should be developed over time by university management. Future projects should ensure that the necessary procurement and financial management capacity is available not only to support project implementation, but also to support the overall development objectives.
- Innovations in higher education finance at the university level are more likely to be successful where a project also addresses regulatory and legislative changes necessary to foster a supportive environment at the national level.
- Empowering young academics in institutional decision making can accelerate institutional change, but long-term strategies need to be in place to fully capitalize on their continued contribution. Since such empowerment accelerates their professional promotion prospects there is a risk of capacity drainage. Retention strategies for junior academics with strong capacity should be clarified. Longer-term strategies will consider ways not only to maintain their involvement, but also to develop their role as champions for change.
- While mutual agreement on the nature of performance indicators, and standardization of data collection techniques are important, they are insufficient in themselves to effect lasting institutional change. It is necessary to have the skills, experience and motivation present to analyze the data and incorporate the findings into decision-making processes within the institutions. Identification of motivated champions of analysis, as well as recognition and support for their efforts is key to maintaining appropriate analytic capacity.

Implementation and Operational Lessons:

- Early and continuous training in procurement and financial management within implementation units is necessary to avoid delays and to ensure sustainability of innovations in higher education finance.
- A pro-active, problem-solving approach by the Bank in the early stages of procurement planning within implementing agencies may consume time and resources, but it is effective in minimizing potentially large procurement problems in the longer term.
- A central project coordinating unit (CPCU) contributes significantly to efficient project implementation to a large number of beneficiaries. The CPCU contribution would be enhanced by adding capacity for data analysis to observe more carefully national trends and lessons learned from monitoring and evaluation.
- Because strong institutional development a key benefit of implementing competitive-funding mechanisms in higher education, the World Bank and future borrowers should endeavor to develop

indicators to better monitor qualitative aspects of organizational behaviors that can help identify the loci of institutional change and better measure factors such as institutional autonomy, transparency, accountability, and efficiency.

9. Partner Comments

(a) Borrower/implementing agency:

The QUE funds have been utilized to support 46 study programs which are spread across 11 public institutions. The analysis on the quality of students input reveals that these grantees are amongst the best study programs in the country. The project has the primary objective of improving the quality of undergraduate education in meeting the demand of national as well as global market through the improvement of 5 main strategic issues namely:

Relevance, Academic atmosphere, Internal management and organization, Sustainability, and Efficiency and productivity or popularly known as RAISE.

The process to select the grantees has been coordinated by the Board of Higher Education (BHE) in close coordination with the Central Project Coordination Unit (CPCU). The monitoring and evaluation process have also been organized by the BHE and was initially under the collaboration with the Quality Assurance Agencies of the United Kingdom. Various procedures and good practices were developed and perfected during the selection as well as monitoring and evaluation processes of the QUE project. Such good practices have been very much adopted by the Directorate General for Higher Education in implementing its funding policies.

The rigorous monitoring and evaluation processes involving national as well as international peers clearly reveal that the project has been by and large successfully implemented where desirable outputs, outcomes and impacts are generally met. Notable outputs are improved quality of human resources, state of the arts equipment, teaching and learning materials, better physical facilities etc. Considerable outcomes are primarily apparent in terms of improved external efficiency indicated by graduates capacity in meeting the job market demand in country as well as overseas, more efficient and productive internal process demonstrated by shortened length of study, improved GPA, etc. Although it may be too naïve to single out the QUE as the primary stimulating factor, during the period of this project significant institutional capacity building was particularly apparent amongst the higher education institutions receiving the grants. Significant elements of the institutions are attentively watching the QUE implementation with keenness. In addition, various good practices engendered by the QUE such as teaching and research grants, policy studies and lecture notes awards have also improved the overall academic atmosphere especially at the grantees' level.

Notwithstanding the aforesaid success story, the project has also incurred some unexpected drawbacks including some internal contention within the institution receiving the grant. The allocation of grants to study program without a proper schemes of coordination at the institution level is one such contention. In addition, the choice of using a study program which is apparently a non-resource unit as the grantee (a non-traditional approach to program funding in Indonesia's universities) has also created some problems. The latter is particularly apparent in the case of a department running more than one study program.

All in all, the implementation of the new paradigm in resource allocation through a proposal-based block grant scheme, implemented in this project, has been considered as a fresh breeze in the higher education development. This approach has a number of desirable features which among others are:

a) it is rooted at the institutional needs and capacity to operate, utilize and manage due to the fact that it is

based on proposed plan submitted by grantees

- b) it has undergone selection process which minimizes risk for misallocation
- c) the introduction of commitment fee to be made available by grantees has improved sustainability of the invested resources
- d) it links investment with program activities which are directly geared towards quality improvement
- e) closely monitored by peers which attest academic issue rather than merely administrative matters

Finally, cognizant of the importance of this project within the overall framework of higher education development in this country, the following direction is commendable for future consideration:

- At some grantees resource sharing becomes a crucial problem. There is confusion on whom the new investment shall belong to. Although the Head of Department or the Dean is the ex-officio director, dispute still arises when sharing of resources becomes an issue. It is recommended, therefore to select the department or higher level resource unit, instead of the study program unit as preferred the grantee in the future.
- Strict adherence to the contract is critically important and penalty should be enforced in case of noncompliance, including for example the commitment to provide the counterpart funding of certain portion. Grantees that cannot meet the promised targets without acceptable reasons should be penalized.
- Suitable measures for attesting the international quality for an undergraduate education needs to be rigorously and clearly defined. The use of GRE test is considered far from adequate for the reasons that such test is not available for all fields of disciplines and is more appropriate for preparing students who are seeking graduate education.
- Need to develop systematic sustainability programs to ensure continuity of the project paradigm across higher education system (not only within individual programs involved in the project but also to the system as a whole)
- More autonomy and flexibility at the institution level especially in conjunction with resource management and investment planning should be promoted and be geared towards organization health. This should include the simplification of procurement procedures while maintaining the overall efficiency and effectiveness of the project implementation
- In order to sustain and further develop the endeavor, follow up program to promote excellence which has already initiated by the DGHE through the provision of Scheme B Funding (regional focus, international competitiveness, etc.) need to be seriously thought of and planned. This opens up opportunities for the donors to chip in.
- It is expected, in the foreseeable future there shall be some form of legal reform on government financial structure which is accordingly responded by the donors to support the implementation of the block grant as expected; including integrated reporting and evaluation procedures.
- Future projects should consider what kinds of sanctions or punishments can be meted out when grant-winning study programs do not meet their performance indicator targets. Consideration should be given for alternative ways to measure institutional impact and not just student output indicators.

- On the side of the World Bank, from experience with the QUE Project, the DGHE finds that greater continuity of the Task Team Leader assigned to the project is critical to its consistent and coherent implementation. This also helps with the consistency in application of procurement regulations.
- Training of the LPIU staff in procurement and financial management should start as early as possible.
- Moreover, from experience the DGHE finds that it is best to have the TTL resident in Jakarta, given that a DC-based TTL often incurs delays in approval of non-objection letters.

(b) Cofinanciers:

Not Applicable

(c) Other partners (NGOs/private sector):

Not Applicable

10. Additional Information

Annex 1. Key Performance Indicators/Log Frame Matrix

| Consolidated Performance Indicator Data for Four Primary Indicators Final Achievement Against Baseline | | | | | | | |
|--|-----------------------------------|---|-------------------|---------------------------|---|-----------------------------------|--------------------|
| PERFORMANCE INDICATOR | ISSUE | Negative Performance Outcome ¹ | | Steady State ² | Positive Performance Outcome ³ | | Data not available |
| | | Substantial Decrease | Moderate Decrease | | Moderate Increase ³ | Substantial Increase ³ | |
| | | x > 10% | 10% < x < 5% | | 5% < x < 0% | 10% < x < 5% | |
| UMPTN | Quality at Entry & Attractiveness | 2 | 2 | 19 | 14 | 5 | 4 |
| | | 4% | 4% | 41% | 30% | 11% | 9% |
| GPA | Quality of Instruction & Process | 0 | 0 | 11 | 17 | 18 | 0 |
| | | 0% | 0% | 24% | 37% | 39% | 0% |
| Duration of Study | Internal Efficiency | 0 | 1 | 12 | 10 | 23 | 0 |
| | | 0% | 2% | 26% | 22% | 50% | 0% |
| Waiting time to first Employment | External Efficiency | 1 | 1 | 5 | 3 | 27 | 9 |
| | | 2% | 2% | 11% | 7% | 59% | 20% |
| 1 Number and Percentage of Cases where Final Performance Indicator was less than Baseline Indicator | | | | | | | |
| 2 Number and Percentage of Cases where Final Performance Indicator varied less than 5% from Baseline Indicator | | | | | | | |
| 3 Number and Percentage of Cases where Final Performance Indicator was greater than Baseline Indicator | | | | | | | |

| Batch 1 QUE Study Program Grants | | | | |
|---|----------|----------|----------|--------------|
| Meeting or Exceeding Mid and Final Performance Targets | | | | |
| n = 16 | | | | |
| | UMPTN | GPA | Duration | Waiting Time |
| At Mid-term | 9 | 12 | 8 | 9 |
| At Final | 3 | 8 | 6 | 4 |
| Midterm Not Reported | 1 | 2 | 2 | 5 |
| Final Not Reported | 8 | 3 | 3 | 5 |
| Batch 2 QUE Study Program Grants | | | | |
| Meeting or Exceeding Mid and Final Performance Targets | | | | |
| n = 14 | | | | |
| | UMPTN | GPA | Duration | Waiting Time |
| At Mid-term | 6 | 6 | 7 | 9 |
| At Final | 2 | 6 | 4 | 8 |
| Midterm Not Reported | 0 | 2 | 3 | 3 |
| Final Not Reported | 2 | 3 | 2 | 5 |
| Batch 3 QUE Study Program Grants | | | | |
| Meeting or Exceeding Mid and Final Performance Targets | | | | |
| n = 16 | | | | |
| | UMPTN | GPA | Duration | Waiting Time |
| At Mid-term | 9 | 14 | 7 | 10 |
| At Final | 9 | 7 | 6 | 7 |
| Midterm Not Reported | 1 | 0 | 1 | 2 |
| Final Not Reported | 3 | 1 | 2 | 5 |
| Consolidated QUE Study Program Grants | | | | |
| Meeting or Exceeding Mid and Final Performance Targets | | | | |
| n = 46 | | | | |
| | UMPTN | GPA | Duration | Waiting Time |
| At Mid-term | 24 (55%) | 32 (76%) | 22 (55%) | 28 (78%) |
| At Final | 14 (42%) | 21 (54%) | 16 (41%) | 19 (61%) |
| Midterm Not Reported | 2 (4%) | 4 (9%) | 6 (13%) | 10 (22%) |
| Final Not Reported | 13 (28%) | 7 (15%) | 7 (15%) | 15 (33%) |

Annex 2. Project Costs and Financing

Project Cost by Component (in US\$ million equivalent)

| Component | Appraisal Estimate US\$ million | Actual/Latest Estimate US\$ million | Percentage of Appraisal |
|---|------------------------------------|--|-------------------------|
| A. Improving Quality through Competitive Grants to Undergraduate Study Programs in public and private universities. | 94.80 | 66.31 | 0.699 |
| B. Improve Discipline Service Centers through Direct Investment and Performance-Based Awards | 10.00 | 0.22 | 0.022 |
| C. Support to the CPCU | 2.50 | 1.12 | 0.448 |
| Total Baseline Cost | 107.30 | 67.65 | |
| Price Contingencies | 1.80 | | |
| Total Project Costs | 109.10 | 67.65 | |
| Total Financing Required | 109.10 | 67.65 | |

Project Costs by Procurement Arrangements (Appraisal Estimate) (US\$ million equivalent)

| Expenditure Category | Procurement Method ¹ | | | N.B.F. | Total Cost |
|---|---------------------------------|----------------|--------------------|----------------|-------------------|
| | ICB | NCB | Other ² | | |
| 1. Works | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) |
| 2. Goods | 0.50 (0.50) | 0.10 (0.10) | 0.20 (0.10) | 0.00 (0.00) | 0.80 (0.70) |
| 3. Services Consultants and Training | 0.00 (0.00) | 0.00 (0.00) | 5.20 (3.60) | 0.00 (0.00) | 5.20 (3.60) |
| 4. Project Management CPCU and BHE | 0.00 (0.00) | 0.00 (0.00) | 3.60 (1.70) | 0.00 (0.00) | 3.60 (1.70) |
| 5. DSC | 0.00 (0.00) | 0.00 (0.00) | 9.50 (6.70) | 0.00 (0.00) | 9.50 (6.70) |
| 6. QUE Grants | 0.00 (0.00) | 0.00 (0.00) | 90.00 (58.50) | 0.00 (0.00) | 90.00 (58.50) |
| Total | 0.50 (0.50) | 0.10 (0.10) | 108.50 (70.60) | 0.00 (0.00) | 109.10 (71.20) |

Project Costs by Procurement Arrangements (Actual/Latest Estimate) (US\$ million equivalent)

| Expenditure Category | Procurement Method ¹ | | | N.B.F. | Total Cost |
|----------------------|---------------------------------|----------------|--------------------|----------------|----------------|
| | ICB | NCB | Other ² | | |
| 1. Works | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) |
| 2. Goods | 0.34 (0.34) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 0.34 (0.34) |
| 3. Services | 0.00 | 0.00 | 1.01 | 0.00 | 1.01 |

| | | | | | |
|---|----------------|----------------|------------------|----------------|------------------|
| Consultants and Training | (0.00) | (0.00) | (0.84) | (0.00) | (0.84) |
| 4. Project Management CPCU and BHE | 0.00 (0.00) | 0.00 (0.00) | 1.12 (0.89) | 0.00 (0.00) | 1.12 (0.89) |
| 5. DSC | 0.00 (0.00) | 0.00 (0.00) | 0.01 (0.01) | 0.00 (0.00) | 0.01 (0.01) |
| 6. QUE Grants | 0.00 (0.00) | 0.00 (0.00) | 65.17 (53.65) | 0.00 (0.00) | 65.17 (53.65) |
| Total | 0.34 (0.34) | 0.00 (0.00) | 67.31 (55.39) | 0.00 (0.00) | 67.65 (55.73) |

^{1/} Figures in parenthesis are the amounts to be financed by the Bank Loan. All costs include contingencies.

^{2/} Includes civil works and goods to be procured through national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Project Financing by Component (in US\$ million equivalent)

| Component | Appraisal Estimate | | | Actual/Latest Estimate | | | Percentage of Appraisal | | |
|---|--------------------|-------|------|------------------------|-------|------|-------------------------|-------|------|
| | Bank | Govt. | CoF. | Bank | Govt. | CoF. | Bank | Govt. | CoF. |
| A. Improve quality through competitive grants to undergraduate study programs in public and private universities | 62.40 | 33.40 | | 54.65 | 11.66 | | 87.6 | 34.9 | |
| B. Improve Discipline Service Centers (DSC) through direct investment and performance-based awards | 7.10 | 3.00 | | 0.18 | 0.04 | | 2.5 | 1.3 | |
| C. Support the CPCU | 1.70 | 1.50 | | 0.90 | 0.22 | | 52.9 | 14.7 | |

Annex 3. Economic Costs and Benefits

Economic Costs and Benefits were not calculated for this project.

Annex 4. Bank Inputs

(a) Missions:

| Stage of Project Cycle | No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.) | | Performance Rating | | |
|-----------------------------------|--|-------|--|-------------------------|-----------------------|
| | Month/Year | Count | Specialty | Implementation Progress | Development Objective |
| Identification/Preparation | | | | | |
| | 7/23/1996 | 7 | Senior Economist (1) Higher Education Specialist (2) Higher Education Consultant (1) Procurement Specialist (1) Financial Management Spec. (1) Operations Officer (1) | S | S |
| | 11/15/1996 | 4 | Senior Economist (1) Higher Education Specialist (2) Operations Officer (1) | S | S |
| Appraisal/Negotiation | | | | | |
| | Appraisal 3/13/1997 | 6 | Senior Economist (1) Higher Education Spec. (1) Higher Education Cons. (1) Procurement Spec. (1) Financial Management (1) Operation Officer (1) | S | S |
| Supervision | | | | | |
| | 08/29/1997 | 3 | SENIOR ECONOMIST (1) CONSULTANT (1) OPERATIONS OFFICER (1) | S | S |
| | 12/09/1998 | 4 | OPERATIONS OFFICER (1) OPERATIONS (2) HIGHER EDUCATION (1) | S | S |
| | 06/24/1999 | 2 | TASK MANAGER (1) PROCUREMENT OFFICER (1) | S | S |
| | 06/24/1999 | 1 | CONSULTANT (1) | S | S |
| | 03/17/2000 | 2 | TASK MANAGER (1) CONSULTANT (1) | S | S |
| | 07/29/2000 | 3 | TASK TEAM LEADER (1) HIGHER ED SPECIALIST (1) IMPLEMENTATION SPEC. (1) | S | S |
| | 10/12/2001 | 2 | CONSULTANT (1) CONSULTANT (1) | S | S |
| | 06/14/2002 | 3 | TASK MANAGER (1) OPERATIONS SPECIALIST (1) SR. GENERAL EDUCATOR (1) | S | S |
| | 01/31/2003 | 4 | TASK TEAM LEADER (1) EDUCATION SPECIALIST (1) PROCUREMENT SPEC. (1) OPERATIONS SPEC. (1) | S | S |
| | 08/08/2003 | 5 | EDUCATION SPEC, TTL (1) SEN. EDUCATION SPEC. (1) | S | S |

| | | | | | |
|------------|------------|---|---|---|---|
| | 01/26/2004 | 4 | CONSULTANT (1) FINANCIAL MANAGEMENT SPECIALIST (1) DATA PROCESSING SPECIALIST (1) OPERATIONS OFFICER (1) FINANCIAL MANAGEMENT SPECIALIST (1) PROCUREMENT SPECIALIST (1) IMPLEMENTATION SPEC. (1) | S | S |
| ICR | 9/13/2004 | 3 | HIGHER EDUCATION SPECIALIST (1) | S | S |

(b) Staff:

| Stage of Project Cycle | Actual/Latest Estimate | |
|----------------------------|------------------------|-------------|
| | No. Staff weeks | US\$ ('000) |
| Identification/Preparation | n/a | |
| Appraisal/Negotiation | n/a | 485,605 |
| Supervision | n/a | 378,945 |
| ICR | n/a | |
| Total | n/a | 864,550 |

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

| | <u>Rating</u> | | | | |
|--|------------------------------------|-------------------------------------|------------------------------------|-------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> <i>Macro policies</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input checked="" type="checkbox"/> <i>Sector Policies</i> | <input checked="" type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input checked="" type="checkbox"/> <i>Physical</i> | <input type="radio"/> H | <input type="radio"/> SU | <input checked="" type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input checked="" type="checkbox"/> <i>Financial</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input checked="" type="checkbox"/> <i>Institutional Development</i> | <input checked="" type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Environmental</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| | | | | | |
| <i>Social</i> | | | | | |
| <input type="checkbox"/> <i>Poverty Reduction</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Gender</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Other (Please specify)</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Private sector development</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Public sector management</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Other (Please specify)</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance

Rating

- | | | | | |
|---|--------------------------|------------------------------------|-------------------------|--------------------------|
| <input checked="" type="checkbox"/> Lending | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input checked="" type="checkbox"/> Supervision | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input checked="" type="checkbox"/> Overall | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |

6.2 Borrower performance

Rating

- | | | | | |
|---|-------------------------------------|------------------------------------|-------------------------|--------------------------|
| <input checked="" type="checkbox"/> Preparation | <input checked="" type="radio"/> HS | <input type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input checked="" type="checkbox"/> Government implementation performance | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input checked="" type="checkbox"/> Implementation agency performance | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input checked="" type="checkbox"/> Overall | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |

Annex 7. List of Supporting Documents

The following documents are filed in the ImageBank, the project's IRIS4 folder, or the SAP/Portal systems:

List of external evaluation reports received

- 1 Faculty of Computer Science – UI, Review date 15-17 December, 2003
- 2 Biology Study Program – UGM, Review date 6-7 November, 2003
- 3 Plant Pests and Diseases Dept. – IPB, Review date 11-12 December, 2003
- 4 Biology Study Program – ITB, Review date 3-4 November, 2003
- 5 Biology Department – IPB, Review date 8-9 December, 2003
- 6 Geophysics Study program – UGM, Review date 17-19 June, 2003

