Risk Description	Rating	Mitigation Measures	Responsibilities
Technical	<u> </u>		
Limited social awareness of career paths and social norms constraining female students' enrollment and female graduates' employment in technical jobs	М	Dedicated support for female students' career guidance, industry attachment programs, and mentoring programs will be implemented. Through gender- themed training for faculty members and students as well as industry partners, and women-friendly facility design, the project will demonstrate balanced gender roles within the educational environment and social interactions.	Participating universities with the support of MHECA and UGC Industry partners
Fiscal constraints may undermine financial sustainability of the new technology programs	М	Commitment for recurrent budget, which is mostly for staff salaries, will be closely monitored at both budget and expenditure levels to ensure sustainable financing.	Participating universities with the support of MHECA, UGC, and MOFMM
Limited cooperation from industries leading to lower graduate employment and underutilization of laboratories and industry collaboration and innovation centers	S	Close industry consultation in academic program design and implementation will be sought throughout the project implementation. Dedicated industry liaison officers will be engaged, and faculty members will be trained and strongly motivated for close industry engagement. Laboratories and other facilities that are in high demand for education and industry collaboration activities will be prioritized and usage level will be closely monitored.	Participating universities with the support of MHECA and UGC
Financial Management			
 (i) Implementing entity. The capacity gaps of staff at executing agency and implementing agency in following ADB guidelines, reporting, and disbursement procedures may affect the accountability and reporting aspects. 	H	PMU and PIU have been established with adequate number of staff. A comprehensive PAM has been developed to guide dedicated PMU and PIUs to ensure effective and accountable utilization of loan proceeds to achieve the project objectives, while mitigating identified risks. PMU and PIU staff will be oriented on PAM and specific training will be conducted.	PMU, PIU, and ADB
 (ii) Funds flow. Because of budgetary constraints, release of government funds for planned capital expenditure has been curtailed in the recent past. This trend may affect the progress of the project. 	Μ	Government counterpart funding will be limited to tax and duties and recurrent expenditures. There will be a covenant included in the loan agreement requiring the government to provide adequate and timely counterpart funding.	MOFMM
(iii) Staffing. While adequate book-keeping and/or	М	Rotation of staff to be carried out to the extent feasible and periodic transfer of	PMU, PIU, and ADB

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Rating	Mitigation Measures	Responsibilities
accounting skills are available at the ministry and the four universities, there is routine staff turnover because of the government's regular, periodic staff transfer policy. The replacements provided may not have the same level of skills and aptitude in general and no entity- specific experience, resulting in protracted learning curves.		seconded finance staff between the project and the respective executing agency and implementing agencies finance unit is recommended as it will create a pool of staff conversant with project operations, providing flexibility in any contingencies. Staff to be provided specific training in ADB requirements. Key PMU and PIU staff will be hired externally and be remunerated at market rates to mitigate turnover.	PMU and PIU
 (iv) Accounting policies and procedures. MHECA uses a partial accrual accounting system (with no depreciation accounting for fixed assets) while the universities use accrual accounting. 	М	A cash-based accounting policy and system will be implemented across the executing agency and all implementing agencies for the project. Technical support will be needed by the executing agency to prepare an accounting manual, and the manual disseminated among all relevant staff (executing agency and implementing agency and project) including close follow up for initial implementation. A common accounting software package will be adopted by PMU and	PMU and PIU PMU and PIUs
		PIUs for easier recording and reconciliation of financial records and reporting.	
 (v) Fixed assets control. The four universities have weak fixed assets control in (a) master fixed asset register not reconciled with asset user locations; (b) absence of a uniform coding system for asset records and labeling; (c) ineffective annual physical verification; (d) lack of effective procedures to record transfer of assets between internal and/or external divisions or departments; and (e) fixed asset control software system not integrated with main accounting system. 	H	Regular quantity-wise reconciliation of master fixed asset register (computerized) with divisional and/or sectional inventories will be carried out, especially before the annual physical verification. All asset items will be labelled with a unique code which should be indicated in the fixed asset register and all other asset records. The common accounting software to be used by PMU and PIUs will include fixed asset registry function.	PMU and PIUs
 (vi) Internal check. Because of distribution of work among the finance staff (by the executing agency and all implementing agencies), grouping the work based on 	M	At the project level the scope available for internal check can be further limited because few staff are directly assigned to PMU and/or PIU. To mitigate the associated risks, the level of internal audit on project operations should be	PMU and PIUs in coordination with internal auditors

Risk Description	Rating	Mitigation Measures	Responsibilities
volume instead of function, the control exercisable though internal check has been affected, rendering segregation of duties ineffective (e.g., distribution of work among payroll staff by allocating a certain number of names, instead of functional distribution–data entry, validation and/or processing, payment). However, in other transactions, segregation of duties works better.		ramped up. Further, the possibility of using executing and/or implementing agency staff for certain critical functions such as payments should be considered while closer supervision is exercised by the executive finance staff.	
(vii) Internal audit. The internal audit units of MHECA and two of the four universities do not have adequately experienced and qualified staff to perform internal audit functions effectively.	Н	At least the approved cadres for each internal audit unit need to be filled, and staff with qualifications and experience commensurate with internal audit functions recruited especially at Rajarata and Sabaragamuwa universities. As a stop-gap measure, a dedicated internal auditor will be hired at PMU to support all PIUs in project implementation activities in coordination with internal auditors at MHECA and the universities. Existing internal audit staff capacity will be strengthened with regular and systematic training in internal audit.	PMU and PIUs
(viii) External audit. In recent years, audits have not been carried out and audit observations are not followed up in a timely manner to address systematic weaknesses	H	There will be timely submission of project financial statements through the use of common accounting software. Annual audit to be carried out by an independent external auditor, acceptable to AGD. Audit observations and those resulting in qualified opinion will be closely monitored for resolution or system improvement in a timely manner.	PMU and PIUs MHECA and AGD PMU and PIUs / MHECA and four universities
(ix) Information systems. The computerized software used by MHECA and the universities are stand-alone systems with weak password control and data back-up practices and many manual interventions for integration of information.	H	The universities' financial management staff will be trained in key risk areas in existing information systems for improvement. For project purposes, a common accounting software package will be used at PMU and PIUs and will include fixed asset management.	PMU and PIUs

Risk Description	Rating	Mitigation Measures	Responsibilities
Procurement			
 (i) Poor response to bid invitations because of lack of transparency and use of inadequate procurement methods (e.g., limited competition) 	S	All procurements under the project will follow ADB Procurement Policy and Regulations and will be well publicized in executing agency and implementing agency websites in addition to national newspapers, as being done presently.	PMU and PIUs
(ii) Inadequate capacity of procurement staff	Μ	Need-based procurement capacity building training programs will be arranged annually for staff directly involved in procurement and those providing support services, e.g., finance.	PMU and PIUs
(iii) Lack of well-established complaint resolution process in practice	М	A practical complaint accepting and dispute resolution procedure will be established at MHECA and university level. Provision should also be made in the agency's website to lodge any complaints online, if necessary. The parties concerned will be notified officially of the outcomes of such resolution processes, while keeping all records at the agency.	PMU and PIUs
(iv) Absence of performance review procedure.	M	In consultation with and approval of the AGD, independent audit for university- level project implementation will include value for money analysis of procurement activities.	PMU and PIUs
(v) Lack of transparency in the procurement process	H	To make the procurement process more transparent, all agencies will post bid invitations, results of concluded procurement processes with details of successful bidder and accepted bid value, and relevant SBDs in their websites. PMU will establish a project webpage accessible from MHECA website with links to the university websites.	PMU and PIUs
(vi) Deviations from recommended procurement guidelines and procedures H = biob. S = substantial. M = moderate		Internal auditor will carry out periodic procurement reviews to verify adherence to the compliance aspect.	PMU and PIU

H = high, S = substantial, M = moderate, L = low. ADB = Asian Development Bank, AGD = Auditor General's Department, MHECA = Ministry of Higher Education and Cultural Affairs, MOFMM = Ministry of Finance and Mass Media, PAM = project administration manual, PIU = project implementation unit, PMU = project management unit, SBD = standard bidding document, UGC = University Grants Commission.

Source: Asian Development Bank.