



Completion Report

Project Number: 28161
Loan Number: 1637
August 2009

Maldives: Postsecondary Education Development Project

Asian Development Bank

CURRENCY EQUIVALENTS

	Currency Unit	–	rufiyaa (Rf)
	At Appraisal		At Project Completion
	30 September 1998		31 July 2007
Rf1.00 =	\$0.085		\$0.078
\$1.00 =	Rf11.77		Rf12.80

ABBREVIATIONS

ADB	–	Asian Development Bank
AusAID	–	Australian Agency for International Development
BME	–	benefit monitoring and evaluation
CMS	–	Centre for Maritime Studies
COL	–	Centre for Open Learning
FE	–	Faculty of Education
FET	–	Faculty of Engineering Technology
FHS	–	Faculty of Health Sciences
FHTS	–	Faculty of Hospitality and Tourism Studies
FMC	–	Faculty of Management and Computing
FSL	–	Faculty of Shariah and Law
GCE	–	general certificate of education
MAB	–	Maldives Accreditation Board
MCHE	–	Maldives College of Higher Education
MNQF	–	Maldives National Qualifications Framework
MOFT	–	Ministry of Finance and Treasury
PIU	–	project implementation unit
TA	–	technical assistance

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

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BASIC DATA

A. Loan Identification

1.	Country	Republic of the Maldives
2.	Loan Number	1637(SF)-MLD
3.	Project Title	Postsecondary Education Development Project
4.	Borrower	Republic of the Maldives
5.	Executing Agency	Ministry of Finance and Treasury (MOFT)
6.	Amount of Loan	SDR4.694 million
7.	Project Completion Report Number	PCR:MLD 1108

B. Loan Data

1.	Appraisal	
	– Date Started	29 June 1998
	– Date Completed	10 July 1998
2.	Loan Negotiations	
	– Date Started	17 August 1998
	– Date Completed	19 August 1998
3.	Date of Board Approval	30 September 1998
4.	Date of Loan Agreement	19 February 1999
5.	Date of Loan Effectiveness	
	– In Loan Agreement	20 May 1999
	– Actual	20 May 1999
	– Number of Extensions	0
6.	Closing Date	
	– In Loan Agreement	31 July 2004
	– Actual ¹	
	– Number of Extensions	2
7.	Terms of Loan	
	– Interest Rate	1%
	– Maturity (number of years)	40 years
	– Grace Period (number of years)	10 years

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
21 September 1999	10 September 2007	108 months
Effective Date	Original Closing Date	Time Interval
20 May 1999	31 July 2004	62 months

¹ The closing date was extended to 31 July 2007, but the account could not be closed until 14 May 2009 due to delayed liquidation of the advance payment.

b. Amount (SDR)

Category		Original Allocation	Partial Cancellation	Last Revised Allocation	Amount Disbursed	Undisbursed Amount ^a
01	Civil Works	1,147,000	(337,900)	1,484,900	1,385,344	99,556
02	Equipment and Materials	797,000	(776,695)	1,573,695	1,880,715	(307,020)
03	Staff Development (Overseas)	931,000	478,891	452,109	419,823	32,286
04	Staff Development (Local)	30,000	(115,731)	145,731	125,611	20,120
05	Consulting Services	857,000	85,269	771,731	638,993	132,738
06	Incremental Recurrent Costs (MCHE)	149,000	139,913	9,087	20,071	(10,984)
07	Project Management Office	186,000	177,839	8,161	0	8,161
08	Service Charge	75,000	0	75,000	75,000	0
09	Unallocated	522,000	480,404	41,596	0	41,596
10	Imprest Account	0	0	0	140	(140)
Total		4,694,000	131,990	4,562,010	4,545,697	16,313

() = negative number, MCHE = .

^a SDR131,990 was partially cancelled on 28 February 2005 in response to the MOFT request to finance the Tsunami Emergency Assistance Project.

9.	Local Costs (Asian Development Bank [ADB]-financed)	
	– Amount	\$2.45 million
	– Percentage of local cost to be financed by ADB at appraisal	60%
	– Percentage of local cost actually financed by ADB	40%

C. Project Data

1. Project Cost (\$ million)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	5.7	6.2
Local Currency Cost	4.8	3.7
Total	10.5	9.8

2. Financing Plan (\$ million)

Cost	Appraisal Estimate	Actual
Implementation Costs		
Borrower-Financed	2.5	3.4
Asian Development Bank-Financed	6.3	6.2
Cofinancing		
Australian Agency for International Development	1.7	0.0
Total	10.5	9.6

3. Cost Breakdown by Expenditure Accounts (\$ million)

Component	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
Base Costs						
Civil Works	0.70	0.95	1.65	1.92	0.03	1.95
Equipment and Materials	0.85	0.70	1.55	2.69	0.33	3.02
Staff Development	2.05	0.55	2.60	0.74	0.28	1.02

Component	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
Consulting Services	1.30	0.45	1.75	0.89	0.26	1.15
Incremental Recurrent Costs (MCHE)	0.05	1.10	1.15	0.03	2.75	2.78
Project Management Office	0.05	0.25	0.30	0.00	0.00	0.00
Subtotal (Base Costs)	5.00	4.00	9.00	6.26	3.65	9.81
Contingencies						
Physical Contingencies ^a	0.35	0.40	0.75	0.00	0.00	0.00
Price Contingencies ^b	0.25	0.40	0.65	0.00	0.00	0.00
Subtotal (Contingencies)	0.60	0.80	1.40	0.00	0.00	0.00
Interest Charges	0.10	0	0.10	0.11	0.00	0.11
Total	5.70	4.80^c	10.50	6.17	3.65	9.82

^a Based on 7% of base cost.

^b Based on 5% of base cost.

^c Includes taxes and duties estimated at \$0.3 million equivalent.

4. Project Schedule

Item	Appraisal Estimate	Actual
Civil Works		
Start	Q4 1998	Q4 2000
Completion	Q3 1999	Q2 2007
Equipment and Materials		
First Procurement	Q1 1999	Q4 2000
Last Procurement	Q2 2001	Q3 2007
Staff Development (Overseas)		
Start	Q4 1998	Q4 2000
Completion	Q4 2003	Q2 2008
Staff Development (Local)		
Start	Q4 1998	Q2 2001
Completion	Q4 2003	Q2 2007
Consulting Services		
Start	Q3 1998	Q4 2001
Completion	Q1 2003	Q3 2007
Project Implementation Unit		
Start	Q4 1998	Q1 2000
Completion	Q4 2003	Q3 2007
MCHE Programs		
Start	Q2 1999	Q1 1998
Completion	Q4 2003	Q3 2007

5. Project Performance Report Ratings

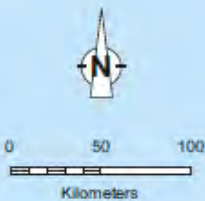
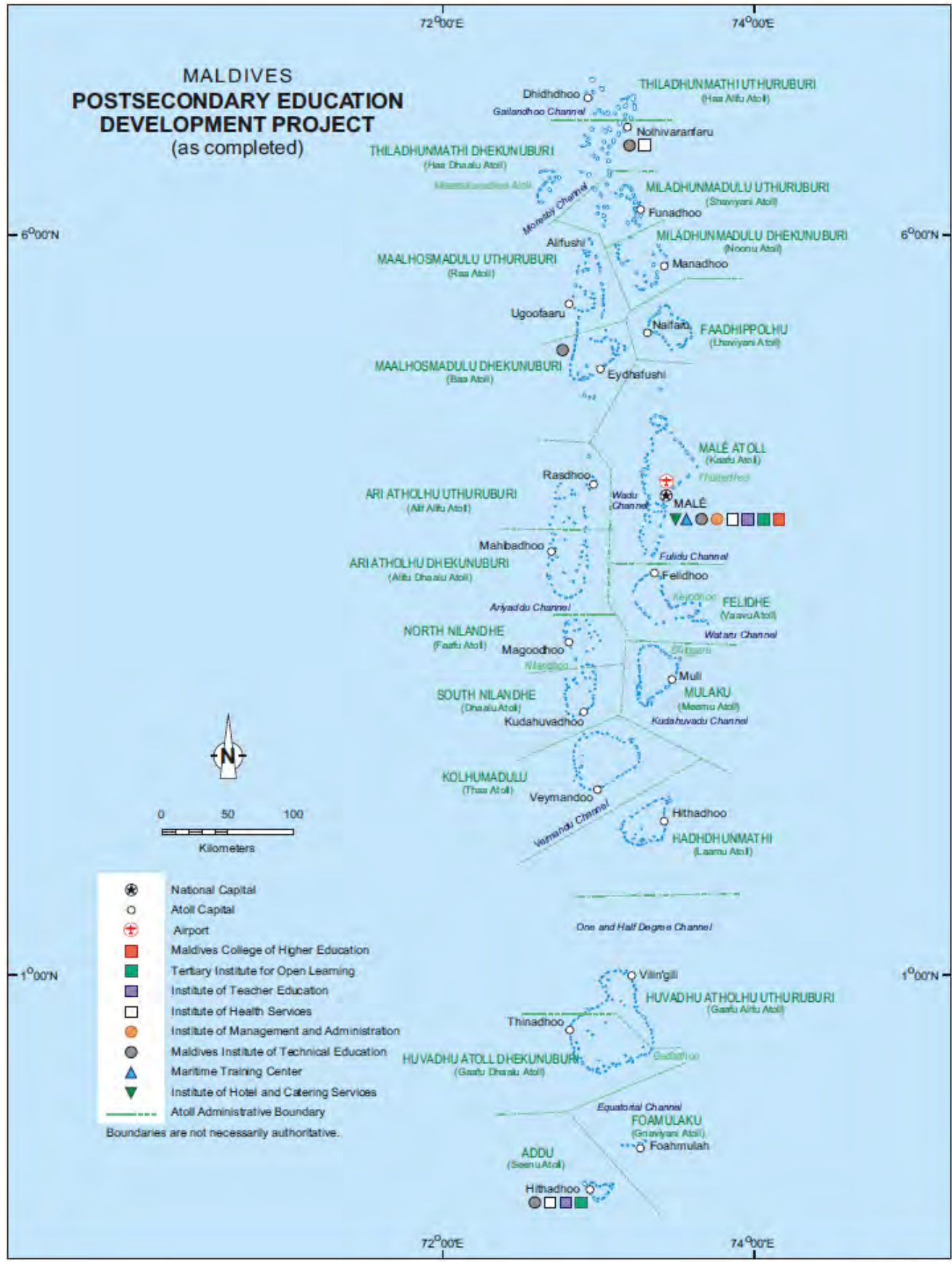
Implementation Period	Ratings	
	Development Objectives	Implementation Progress
20 May to 31 December 1999	Satisfactory	Satisfactory
1 January to 31 December 2000	Satisfactory	Satisfactory
1 January to 31 December 2001	Satisfactory	Satisfactory
1 January to 31 December 2002	Satisfactory	Satisfactory
1 January to 31 December 2003	Satisfactory	Satisfactory
1 January to 31 December 2004	Satisfactory	Satisfactory
1 January to 31 December 2005	Satisfactory	Satisfactory
1 January to 31 December 2006	Satisfactory	Satisfactory
1 January to 31 July 2007	Satisfactory	Satisfactory

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members
Loan Inception	12 April 1999–23 May 1999	2	18	a, c
Loan Review 1	19–22 October 1999	1	8	A
Loan Review 2	14–24 April 2001	1	11	A
Loan Review 3	8–11 October 2001	1	4	A
Loan Review 4	2–7 April 2002	1	6	A
Loan Review 5	15–17 October 2002	1	3	A
Midterm Review	2–10 April 2003	2	18	a, c
Loan Review 6	6–11 October 2003	1	5	A
Loan Review 7	22–24 January 2004	1	3	a
Loan Review 8	15–19 July 2004	1	5	a
Loan Review 9	6–8 March 2005	2	6	a, c
Loan Review 10	8–15 November 2006	2	16	a, c
Loan Review 11	21–22 March 2007	1	2	b
Loan Review 12	18–19 November 2008	3	12	b, c, d
Project Completion Review	3–16 March 2009	3	36	b,,c,,d

a = education specialist, b = social sector specialist, c = project analyst, d = education policy and planning specialist (consultant).

MALDIVES POSTSECONDARY EDUCATION DEVELOPMENT PROJECT (as completed)



- National Capital
 - Atoll Capital
 - Airport
 - Maldives College of Higher Education
 - Tertiary Institute for Open Learning
 - Institute of Teacher Education
 - Institute of Health Services
 - Institute of Management and Administration
 - Maldives Institute of Technical Education
 - Maritime Training Center
 - Institute of Hotel and Catering Services
 - Atoll Administrative Boundary
- Boundaries are not necessarily authoritative.

I. PROJECT DESCRIPTION

1. The postsecondary education system in the Maldives was unable to meet the needs of the country for skilled personnel in key economic sectors. Despite high demand, the supply of educated labor was severely constrained due to limited capacity of the country's secondary and postsecondary education. In addition, postsecondary education suffered from several critical problems. First, postsecondary education institutions were unable to provide quality certificate and diploma programs in the country because many teachers and instructors lacked adequate academic qualifications to teach advanced courses. Second, postsecondary courses did not meet international standards. Third, few grade 10 candidates qualified to progress into upper secondary and postsecondary institutes because of poor teaching quality in secondary schools and resulting poor pass rate particularly in English and mathematics (compulsory secondary subjects).¹ Female students from the atolls seeking admission to postsecondary schools often have difficulty travelling to the capital, Malé, where they must reside in boarding houses or with relatives. Cultural factors also militate against female students traveling away from home. This contributes to potential inequality both in education and modern wage sector employment. Fourth, no coordination existed among postsecondary institutions. The institutions were highly compartmentalized, operated by various ministries, and lacked the collective capacity to respond to the demands of society and the economy. This was viewed as a contributing factor to the human resources deficit facing the country.

2. Against this background, the Government of the Maldives asked for Asian Development Bank (ADB) assistance to improve the quality of, and expand access to, postsecondary education to support economic and social development. In response, ADB designed the Postsecondary Education Development Project.² The overall sector goal of the Project was to reduce the supply–demand gap of the educated labor force in key economic sectors. The first objective of the Project was to strengthen the institutional quality and capacity of the seven existing postsecondary institutions by expanding curriculum choices and raising the quality of courses leading to internationally recognized advance diplomas. The second objective was to develop the capacity of the Maldives College of Higher Education (MCHE)³ to consolidate and coordinate postsecondary administration and academic programs for these institutions with a view to meeting international accreditation standards.⁴ The Project comprised two parts. Part A focused on upgrading the quality of seven existing postsecondary institutions:⁵ (i) Centre for Maritime Studies (CMS), (ii) Centre for Open Learning (COL), (iii) Faculty of Education (FE), (iv) Faculty of Engineering and Technology (FET), (v) Faculty of Health Sciences (FHS), (vi) Faculty of Hospitality and Tourism Studies (FHTS), and (vii) Faculty of Management and Computing (FMC). Project inputs included (i) local and overseas fellowships; (ii) instructional materials; (iii) consulting services; (iv) civil works, furniture, and equipment; and (v) assistance for distance

¹ All grade 10 students are required to take the Cambridge International General Certificate of Secondary Education (GCSE) examination as the country has no separate national examination system for secondary students. The average pass rate is about 23%–24%. Only a small proportion of the GCSE graduates move to advanced “A” level qualifications.

² ADB. 1998. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Maldives for the Postsecondary Education Development Project*. Manila.

³ Establishment of MCHE as the coordinating agency for postsecondary education was recommended by the ADB-funded masterplan study (1996–2005).

⁴ The original objectives or purpose of the Project to offer courses leading to internationally recognized advanced diplomas or meeting international accreditation standards were unrealistic. No commonly recognized international standard exists among countries, except diplomas or degrees in some subjects, e.g., maritime and information technology.

⁵ These comprised five institutes and two centers; however, during implementation the institutes were renamed faculties and subsequently an eighth institution—the Faculty of Shariah and Law—joined the umbrella of MCHE and benefited from the association.

learning. Part B focused on capacity building of MCHE through the provision of (i) civil works, furniture, and equipment for the MCHE central administration offices; a student study center; a multimedia center; and a student dormitory; (ii) consulting services; (iii) fellowships and study visits for MCHE staff; (iv) incremental recurrent costs for MCHE; and (v) establishment of the project implementation unit (PIU) within MCHE. The project framework is in Appendix 1.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

3. At appraisal, the Project clearly supported the Government's priorities for development of postsecondary education⁶ and an economic development strategy.⁷ These priorities emphasized the need to upgrade the quality and supply of postsecondary education for human capital development to serve socioeconomic needs, in particular, in reducing the existing supply–demand gap in the skilled labor market. The Project was also consistent with ADB's 1995 country operational strategy, which was designed to address three key issues: (i) improvement of fiscal management, (ii) promotion of regional development with human resource development, and (iii) environmental protection. Following the refocusing of the operational strategy, human resource development became a high priority for ADB support to meet the demands of a rapidly modernizing economy and to gradually reduce the heavy reliance on foreign workers.⁸

4. At completion, the Project remained relevant to the Government's medium-term objectives and priorities defined in the Seventh National Development Plan (2006–2010) and Vision 2020.⁹ Government objectives underscored the need to increase human resource capacity and productivity by providing relevant education and training to support various sectors of the economy. The Project also remained relevant to ADB's country strategy¹⁰ and ADB's overall policy on postsecondary education,¹¹ which supported the strategies for developing the capacity of postsecondary education by expanding access, improving the quality of instructional and administration staff, operating as a knowledge management organization, and targeting support for postsecondary science and technology as a means of promoting innovation and stimulating economic development. The relevance of the Project is demonstrated by the processing and approval of a linked project in the education sector where the capacity of MCHE and project-induced Maldives Accreditation Board (MAB) will be utilized to provide short-term skills training.¹²

5. The project concept and formulation process correctly identified and addressed the key issues and constraints of postsecondary education (para. 1).

⁶ Formulation of Government's policies and priorities were facilitated by ADB technical assistance support. ADB. 1995. *Technical Assistance to the Republic of the Maldives for the Education Masterplan*. (TA 2324-MLD, \$300,000, approved on 26 April) Manila.

⁷ Department of National Planning, 1995–1999. *Fourth National Development Plan*. Male.

⁸ ADB. 2001. *Country Strategy and Program Update (2002–2004): Maldives*. Manila.

⁹ Government of Maldives, Ministry of Planning and National Development. 2007. *Seventh National Development Plan, 2006–2010*. Malé.

¹⁰ ADB. 2005. *Country Strategy and Program (2006–2008): Maldives*. Manila.

¹¹ ADB. 2008. *Education and Skills: Strategies for Accelerated Development in Asia and the Pacific*. Manila.

¹² ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Maldives for the Employment Skills Training Project*. Manila.

6. The project design included three innovative concepts: (i) an umbrella organization—MCHE—to streamline postsecondary education and associated skills training, reduce transaction costs, improve overall quality, and enhance internal and external efficiency; (ii) a national accreditation agency for postsecondary education and other skills training—MAB; and (iii) a national quality assurance framework—the Maldives National Qualification Framework (MNQF)—to ensure the process of developing and validating curricula for postsecondary qualifications and related skills training comparable with international standards.

7. Wide consultation with key stakeholders was undertaken during project preparation, in particular with existing institutions of postsecondary education including their staff and students. About one third of the students and staff were female, and about 40% of students attending postsecondary schools in Malé were from the atolls where the incidence of poverty was higher than in Malé (50% of the Maldivian population are female and about 75% live in the atolls). The project design provided improved educational and employment opportunities for women and students coming from the atolls.

8. The project scope and design devised at appraisal remained basically unchanged during implementation. However, Australian authorities did not approve the anticipated Australian Agency for International Development (AusAID) grant to support the planned activities of COL and FHS; the overall scope of the Project was subsequently reduced.

9. The Ministry of Finance and Treasury (MOFT) in consultation with key stakeholders implemented the project preparatory technical assistance (TA).¹³ The TA analysis, findings, and recommendations were generally appropriate and retained in the overall project design.

B. Project Outputs

10. The Project generated almost all of its planned outputs, except for the outputs under AusAID funding, without significant deviation in cost, but completion was delayed by more than 3 years. Under part A, the Project achieved quality upgrading and institutional development of five faculties and two centers; and under part B, the capacity building of MCHE was accomplished as designed.

1. Part A: Quality Upgrading of Institutional Programs

11. This component accounted for 52% of the project cost and was designed to upgrade the quality of seven existing postsecondary institutions. Each institute was provided with international consultant services to help raise standards and introduce new curriculum programs. The quality upgrading activities were supported by augmenting the staff profile through higher qualification and training. Details of the staff development program are provided in Appendix 2. Across the MCHE institutions, a wide range of academic and training programs were developed including short-term courses of a few days duration to 6 months; certificate I, II, and III courses that range from 3 to 18 months; diploma and advanced diploma courses from 6 to 18 months; and undergraduate courses of 3 years duration. The entry requirements for short-term and certificate courses are somewhat flexible starting from grade 7 to grade 10;¹⁴ however, for the diploma and advanced diploma courses, the entry requirements are fairly standard:

¹³ ADB. 1997. *Technical Assistance to the Republic of the Maldives for Postsecondary Rationalization and Development*. Manila (TA 2894-MLD, \$150,000, approved on 16 October).

¹⁴ Entry for certificate level I usually requires grade 7 to grade 10 completion; entry for certificate level II requires completion of certificate level I, and entry for certificate level III requires completion of certificate level II in respective subjects.

general certificate of education (GCE) ordinary level (O level) to GCE advanced level (A level), and for undergraduate courses the requirement is GCE A level. MAB approves the entry requirements. While the GCE O and A level standards are needed for international recognition, the minimum number of subjects passed and the level of achievements (A, B, C, D, E) can be flexible to allow disadvantaged students to access these programs by providing specially designed remedial or bridging courses as is available in some other countries in the region. MCHE is aware of this possibility. The following is a summary of project outputs under part A.

12. **Faculty of Education.** FE has developed into a stronger institution both in terms of course offerings and staff capacity, leading to the production of an increased number of qualified teachers for primary and secondary schools. The Project provided FE academic staff with short- and long-term fellowships, and consultancy services in developing course and curricular programs. FE received staff training in two postgraduate and four undergraduate degrees, and two staff attended regional consultations. Currently FE offers 10 courses in the following areas: 1-year diploma in teaching (secondary education), 1-year diploma in teaching Dhivehi language, 1-year diploma in teaching English as a foreign language, 1-year diploma in school management, 2-year diploma in teaching (primary education), 2-year diploma in teaching (middle school), 2-year advance diploma in applied statistics, 3-year bachelor of education (primary education), 3-year bachelor of education (secondary), and 3-year bachelor of arts in teaching English as a foreign language. During the project period, FE produced 2,411 graduates (635 males, and 1,776 females). FE provides outreach certificate courses to atolls through MCHE campuses at Khulhudhuffshi, Thinadoo, and Hithadhoo. Outreach programs in teacher education were also conducted in 2005 and 2006 in Raa Atoll Education Center and A. Dh Atoll Education Center. All FE graduates are absorbed in the public schools as teachers of primary and secondary schools; thus gradually reducing the need for expatriate teachers.

13. **Faculty of Engineering Technology.** Established in 1975, FET is one of the oldest institutions in the country. It benefited from the Project through (i) development of new courses and curricula, (ii) staff development, and (iii) procurement of equipment and instructional materials. As a result, currently FET offers a range of short-, medium- and long-term programs in various engineering disciplines. It offers 6-month certificate III courses in welding and sheet metal, fluid power, and engine repair and maintenance in Malé; and 4-month certificate III courses in atolls through its outreach programs on furniture carpentry and joinery, and wood carving. FET offers 18-month advance certificate programs in engine repair and maintenance, refrigeration and air conditioning, electrical and electronics, welding and metal fabrication, and machine and mechanical fittings, electrical engineering, and wooden and fiber glass boat building; and 2-year programs in mechanical engineering, electrical engineering, and civil engineering. FET's 18-month diploma programs in architecture, mechanical engineering, civil engineering, construction management, electrical engineering, and electronics are designed for students with GCE A levels. For students living in atolls, FET offers 18-month advance certificate courses in power systems and maintenance, desalination systems operation and maintenance, and furniture carpentry and joinery, through its outreach programs. A new undergraduate bachelor in architecture program has also been developed. About 90% of FET students secure employment soon after their graduation as technicians and associated professionals.

14. **Faculty of Health Sciences.** Project support to FHS was extended through staff development and training, curriculum development, equipment, and instructional materials. Four FHS staff received postgraduate degrees and three staff attended regional consultations. FHS offers a 1-year certificate III program in social work; 1-year advance course in primary health

care, nursing, counseling, pharmacy, and family health; 1-year diploma in midwifery and primary health care; 2-year diploma in nursing, primary health care, and pharmacy; 2-year bachelor program in health services management; and 1-year bachelor program in nursing. FHS also operates from the three outreach campuses of MCHE. During the project period, 780 nurses and 803 other health personnel were trained under FHS exceeding the project goal of 300 nurses. The trained personnel are readily employed as nurses, paramedical technicians, and community health workers. Despite the increase in output capacity, FHS cannot fully meet the market demand for health workers and technicians, many of whom come from overseas (mainly India) as health services continue to expand in Malé and the atolls.

15. **Faculty of Hospitality and Tourism Studies.** Assistance provided by the Project to FHTS included staff development, curriculum development in cookery and pastry courses, kitchen equipment, and instructional materials. The Project helped redesign all short- and long-term courses for FHTS. Courses include short in-service programs (3–5 days) in hotel reception, customer relations, housekeeping, laundry operations, food and beverage service, pastry and bakery, commercial cookery, and cleaning procedures; 3-month entry-level courses in tour guiding, tour operations, front office management, housekeeping, and food and beverage; 5-month certificate III programs in front office management, accommodation operation, food and drink operation, and pastry and bakery; 18-month Business Training and Education Council higher national diploma in hotel management, hospitality management, and travel and tourism; and 2-year Business Training And Education Council national diploma in hospitality. FHTS offers courses in French, Japanese, and Russian, and has outreach programs in Adhoo and Adaran islands. With tourism the largest industry in the country and accounting for nearly 38% of government revenues in 2007, FHTS has opportunities to play a greater role in this sector by generating a larger pool of skilled workers, which is currently dominated by expatriate labor.

16. **Faculty of Management and Computing.** Project support to FMC included staff training in two postgraduate qualifications, one higher diploma, and two regional study consultations. FMC operates a number of businesses, commerce and corporate development-related programs and CISCO networking for home and small business. It offers a certificate III program in clerical studies; an advance course in island administration (for public servants), information technology, and management; diploma programs in accounting, business, and information technology, bachelor of business, bachelor of information technology, and courses certified by the Chartered Institute of Management Accountants, and Association of Chartered Certified Accountants. FMC also runs corporate development programs in Dhivehi language, supervisory and management skills, leadership development, customer service, and project management. All graduates are reported to have been gainfully employed in public and private sectors mostly as semiprofessional managers and accountants. Many students are sponsored by employers, and cost recovery through user fees is reported to be about 50%—highest among all faculties.

17. **Faculty of Shariah and Law.** Established in 2000, the Faculty of Shariah and Law (FSL) was not directly supported under the Project. However, FSL benefited under the umbrella of MCHE, like other faculties, in sharing common services and facilities including the centralized system of student admission, finance, and record keeping. FSL was supported under a separate ADB project.¹⁵ FSL offers an advance certificate in Shariah (Islamic law) and law, advanced diploma in Shariah and law, bachelor of laws, master of arts in Shariah, and a diploma in justice

¹⁵ ADB. 1999. *Technical Assistance to the Republic of the Maldives for Strengthening the Legal Education and Judicial Training*. Manila (TA 3389-MLD).

studies. FSL has linkages with the International Islamic University of Malaysia to facilitate their graduates' gaining admission to the International Islamic University of Malaysia's programs with credit transfers. FSL's total output during the project period is 99 graduates (73 males and 26 females) in Shariah and law. FSL graduates work in public and private services or in independent practice in Shariah and common law. FSL's teachers, who are practicing lawyers, generally work part time.

18. **Centre for Maritime Studies.** CMS operates competency-based courses certified by the International Maritime Organization Standards of Training, Certification and Watch keeping. It also provides courses for national standards as approved by the Ministry of Housing, Transport and Environment. These courses include safety programs, petroleum and gas tanker programs, coastal navigation, rating training, and radar navigation and communication. CMS runs 1-year officer training programs for an advanced certificate in marine operations and advanced certificate in marine engineering, which is in demand worldwide but due to the high training cost is unaffordable for most Maldivians. As a result, CMS's officers training program is currently operating at about 50% capacity (total capacity for officers training is 50). Also local shipping companies do not provide opportunities for new school graduates to study cadetship training, which is the first entry requirement to join the officer training programs. MCHE has no authority over private companies that are reluctant to offer the facility as this would be an additional burden on them, and hence this issue was not resolved. During the project period, 1,883 students obtained training and 85% are reported to have been employed immediately. CMS graduates are employed as mariners and seafarers at home and overseas. At appraisal, the projection of 500 mariners each year from CMS was overly optimistic; this should have been adjusted during implementation.

19. **Centre for Open Learning.** COL was initially established in 1999 as the Tertiary Institute for Open Learning and subsequently renamed the Centre for Open Learning. Although COL was not part of the Project, it benefited indirectly from project support as it is under overall MCHE administration. In 2007, COL produced 82 graduates (including 64 females) with certificates in primary teaching (distance). COL currently offers a 1-year English program for 10th graders with an enrollment of 284 (221 females and 63 males).¹⁶ During the initial project years, COL offered an in-service program for primary teachers. This was discontinued due to lack of quality control. More recently, COL repositioned itself mainly as a facilitator of academic and training programs of other faculties outside Malé through distance education delivery and by establishing connectivity with atolls and MCHE's outreach campuses. The only input received from the Project was outreach coordination consultancy for about 1 person-month. COL utilized this to strengthen its campus-based outreach activities. Because the anticipated AusAID grant to support distance education for COL did not materialize, COL's expected development as a distance education provider did not take place. No alternative funds were available to finance this activity.

20. **Graduate Outputs.** An analysis of MCHE's graduate outputs for the project period shows that annual output capacity increased significantly in all programs and courses especially since 2003 (at the time of the midterm review) when the total annual graduate output was about 800; by project completion the annual graduate output was about 1,200—a 50% increase. Total graduate outputs by year and course program are provided in Appendix 3. The Project's

¹⁶ While the overall pass rate in GCE O level (taken at the end of grade 10) is 23%, the pass rate in English, which is a compulsory subject, is only 6% signaling the weakness in teaching and learning English. This issue is partly addressed by the foundation courses developed by the Project.

cumulative target for advanced diplomas was 2,000 graduates with 45% female; at completion the achievement was 3,167 graduates with 60% female. For certificate courses, the target was 3,000 graduates with 45% female, and the achievement was 4,937 graduates with 50% female.

2. Part B: Postsecondary Education Capacity Building

21. Part B of the Project relates to developing the capacity of MCHE¹⁷ to consolidate postsecondary administration and academic programs of all institutions: admissions, accreditation, budgeting, planning, monitoring, student services, and external linkages to international universities with a view to meeting international accreditation standards. Project inputs to MCHE included consultancy services, local and international fellowships, incremental recurrent costs, civil works, furniture, equipment, books, and materials. MCHE was also designated as the Implementing Agency for the Project. The following were accomplished with project support.

22. **Accreditation, Quality Assurance, and Assessment.** MCHE established the academic board as part of the rectorate. A committee on courses and a committee on teaching and learning to facilitate quality assurance through peer review in course development and course delivery were formed. MAB was established in August 2000, and adopted the MNQF in September 2001. The MNQF is modeled after the Australian system and specifies minimum qualifications and contact hours necessary for each level of program awarded. The accreditation process comprises two stages: (i) preapproval stage, and (ii) institution visits. All programs to be accredited must fulfill both criteria. Individual faculties and centers pursue accreditation links to overseas universities and international certification. FSL has a credit transfer arrangement with the International Islamic University in Malaysia, FMC has a franchise arrangement with Middlesex University, FHTS offers the Business and Technology Education Council program qualifications following the British syllabus, and CMS abides by International Maritime Organization standards. Additional opportunities are likely as MCHE develops its capacity and contacts with the international higher education community.

23. **Foundation Courses.** An important achievement of MCHE is the development and delivery of foundation course levels 1 and 2.¹⁸ These were first offered in 2002 with 161 students enrolled in level 1 and 56 enrolled in level 2. By 2007 enrollment in the long-term foundation program increased to 384 (311 females and 73 males), exceeding MCHE's expectations and signaling high social demand for training within the country. The courses are offered both in Malé and in outreach campuses. Upon completion of foundation courses, the students retake their respective GCE O and A level examinations and may proceed to further education and training in MCHE.

24. **Student Services.** The student services office centrally processes admission applications for all faculties and centers, student enquiries, and student records powered by the campus management information system. A student dormitory was constructed under the Project, and MCHE appointed a warden and a registrar.

25. **Budgeting and Accounting.** MCHE administers government capital and recurrent budgets for all affiliated faculties and centers. It has established a centralized financial

¹⁷ MCHE was established on 1 October 1998 through a presidential directive. The establishment of a coordinating authority for MCHE was based on the ADB-financed masterplan study in 1995 (footnote 6).

¹⁸ Foundation courses are designed to prepare students who failed their O level examination in English, mathematics, and other subjects to retake the examination. Minimum entry requirement is E grade at GCSE.

management system following government regulations and practices. However, faculties and centers needed to be provided with some flexibility in some areas, i.e., a petty cash account, especially for the procurement of consumables and supplies. MCHE will review the situation pending the reforms in public sector financial management currently under consideration and any future autonomy to be accorded to MCHE proposed in the draft national university bill to be presented to Parliament in 2009.

C. Project Costs

26. At appraisal, the total project cost was estimated at \$10.5 million equivalent, including taxes, duties, interest charges on the ADB loan, and physical and price contingencies. ADB was to provide a loan of \$6.3 million equivalent (60% of the total project cost) from its Special Funds resources to finance 40% of the foreign exchange and 60% of the local currency costs. The Government's counterpart share was \$2.5 million. AusAID's parallel grant funding of \$1.7 million did not materialize. In addition, \$200,000 was allocated from the Project to the Tsunami Emergency Assistance Project in February 2005, reducing the ADB loan to \$6.173 million and adjusting project costs to \$8.8 million.¹⁹ At completion, the project cost was \$9.823 million; this included the Government's higher than estimated contribution of \$3.650 million equivalent. The project cost at completion is provided in Appendix 4.

27. At midterm (April 2003), the Project had (i) a cost overrun in civil works of about \$0.56 million; and (ii) potential savings from overseas staff development of about \$0.52 million, consulting services of about \$0.25 million, incremental recurrent cost of about \$0.18 million, and project management cost of about \$0.25 million. The savings were reallocated to civil works and MCHE's capacity-building activities.

D. Disbursements

28. The total disbursement at loan closing was \$6.438 million. Most of the costs were for civil works (30% of project funds), equipment and materials (42%), and consulting services (14%). ADB financed all of the disbursement costs. Initial disbursement was slow. The Project's annual disbursements from 1999 to 2007 are presented in Appendix 5.

29. ADB's direct payment, reimbursement, and imprest fund procedures were utilized. An initial imprest advance of \$0.250 million was released for the Project's start-up activities. By 25 August 1999, the Government requested that the ceiling be increased to \$0.250 million to meet the Project's final phase requirements. At project completion, \$23,907 in advanced imprest funds were not liquidated and this were refunded to ADB on 14 May 2009. The total amount comprised expenses under various withdrawal applications that the Executing Agency over claimed and ADB disallowed.²⁰

E. Project Schedule

30. The Project was designed to be implemented over 5 years beginning in January 1999 and ending in January 2004. Actual implementation commenced in September 1999 and was completed in July 2007 (Appendix 6). The appraisal estimate of completion of all key activities was highly optimistic (see Basic Data, table under C.4). At midterm review, the Project was

¹⁹ ADB. 2005. *Report and Recommendation of the President to the Board of Directors on a Proposed Grant and Loan to the Republic of the Maldives for the Tsunami Emergency Assistance Project*. Manila.

²⁰ ADB is to finance 80% of the expenditures that fall under incremental recurrent costs (category 6) by MCHE. However MCHE claimed 100% by mistake.

found to be behind schedule due to (i) delays in locating a PIU office to commence its activities, (ii) delays and mistakes in the design plan of the MCHE central administration building; and (iii) delayed establishment and inadequate staffing of the PIU.

31. The delay in completing the design plan (due to disagreement between MCHE and the Ministry of Works) of the central administration building led to the late commencement of its construction. At midterm review, the Project was estimated to close on 30 June 2004 as planned, about \$1.34 million would remain unutilized and would thus be cancelled. However, the midterm review mission recommended an extension of 12 months so that the activities within the scope of the existing Project could be expanded to strengthen and support the development of MCHE. Following the devastating tsunami in December 2004, the Government requested a further extension of the Project until 31 July 2007 to offset the tsunami effects on project implementation.²¹

F. Implementation Arrangements

32. In general the Project was implemented as planned. MOFT was the Executing Agency and MCHE the Implementing Agency. The original PIU was established in the Ministry of Education and subsequently transferred to MCHE. A project steering committee was organized to provide policy guidance to the Project. However, against the recommendation in the project documents and loan covenants, MCHE did not appoint a full-time project director or provide the specialist staff needed for the Project. The project director was a full-time staff member of MCHE. This was a contributing factor to the substantial time overrun of the Project.

G. Conditions and Covenants

33. The loan agreement contained 24 covenants, of which 19 were satisfactorily complied with. Three covenants were partially complied with, and two covenants were not complied with (Appendix 7). In general, the covenants were relevant, except those relating to cofinancing arrangements that did not materialize. No covenant was modified, suspended, or waived. Reporting was generally satisfactory, although a number of reports were received late.

34. One covenant that was not complied with relates to the AusAID grant that did not materialize as anticipated in the loan agreement. The Borrower was required to obtain the AusAID grant or make other arrangements satisfactory to the ADB. When the AusAID grant did not come through, the Borrower did not make any other arrangement. The other covenant that was not complied with is the evaluation of project benefits by MOFT after the Project was completed, in accordance with a schedule and terms of reference agreed upon by MOFT and ADB.

35. Covenants that were partially complied with relate to benefit monitoring and evaluation (BME) during implementation, adequate staffing and operation of the PIU, and submission of the Borrower's project completion report. MCHE designed and installed a management information system, with its main purpose to compile comprehensive student data and records (not to be a tool for monitoring and evaluation). BME on the basis of baseline data has not been carried out as required under the covenant. However, MCHE compiled relevant data for preparing ADB's project completion report.

²¹ MCHE staff and facilities were extensively engaged over a considerable time in the relief and rehabilitation work as a result of the tsunami that struck the Maldives on 26 December 2004. In addition, the outer campuses of MCHE were substantially damaged and needed repairs before resuming academic activities. Therefore, the Government requested an extension of the Project in 2005.

H. Consultant Recruitment and Procurement

36. **Consultants.** The consulting services contract was signed in November 2001, to be delivered during 2002–2003. However, MCHE decided that some consultancies in the package were not needed, i.e., an external relations adviser, a finance administration and budget adviser, and subject adviser for maritime studies. Unfamiliarity with the procedures on evaluation contributed to delay in awarding the contract. In addition, commencement was also later than planned due to delay in preparing office accommodation and workstations for the consultants.

37. At the time of the midterm review in April 2003, 28 person-months of consulting were completed; at project closing a total of 51 person-months (45 person-months of international and 6-person months of national consultant services) were rendered. Some variations were proposed and approved within the scope of the consultancy package to meet MCHE's requirements.

38. **Civil Works.** The Project planned four civil works activities, the MCHE central administration building, a student dormitory in Malé, and two classrooms for FHS in Thinadhoo and Kuludhufusee. The student hostel was handed over to MCHE on 9 April 2003, and the Thinadhoo classroom in September 2002. The delay in completing and handing over the Kuludhufushi classroom was due to cost overrun.

39. Implementation of major civil works was delayed by about 2 years because of the time required to complete the design plans. Inconsistencies, variations, and omissions in Ministry of Construction and Public Work-approved design plans of the central administration building resulted in increased cost of \$1.34 million, instead of the appraisal estimate of \$0.93 million. Variations from the original appraisal design included having three floors instead of two and a smaller multipurpose hall. The revised design maximized the use of scarce land in Malé.

40. **Equipment and Furniture.** The PIU procured all goods. Procurement of equipment and furniture for MCHE's central administration offices, including the multimedia room and students dormitory, was delayed due to construction delays. The planned procurement of a mobile training vessel for FET was cancelled as MCHE and FET perceived it to be too expensive (high cost of maintenance and its overall inappropriateness for FET's training activities). Other pieces of equipment for FET, FHTS, and FHS were procured as planned with some delay. Similarly, delay occurred in the procurement and installation of the computer simulator for CMS.

I. Performance of Consultants, Contractors, and Suppliers

41. The consultant's team needed to adjust to the local conditions and systems. MCHE and the faculties also needed adjustments to accommodate them and develop working relationships. Consultants worked in diverse areas such as institutional governance; administration and development; management information system development; academic development; and curricula articulation and development in various disciplines including engineering technologies, health sciences, maritime studies, and outreach program development and coordination. Implementation of all recommendations from the consultants was a challenging task for MCHE and faculties. Some problems related to perceptions and personalities, and the performance of all consultants was not uniform. However, MCHE valued the consultants' contributions in designing new courses and curricula; strengthening the existing course and curricula; establishing MAB and the MNQF; and helping with institutional academic planning and

coordination, finance administration and budget planning, and student administration and services. The Government assessed the consultants' overall performance to be satisfactory.

42. The Ministry of Public Works supervised the civil works. Despite delay in the completion of the MCHE central administration building, the student dormitory, and classrooms in outer campuses of MCHE, the Government rated the quality of civil works provided by the contractors as highly satisfactory. Major equipment procurement involved the procurement of engineering technology equipment for FET, computer simulators for CMS, and equipment for FHTS. Most of the equipment, including computer simulators and engineering technology, were installed by the suppliers and carried warranty for parts and labor. Despite delay in contracting and delivery of equipment, the Government rates the quality of equipment and service provided by the suppliers as satisfactory. All consulting contracts and performance evaluation reports for them were completed.

J. Performance of the Borrower and the Executing Agency

43. Initial difficulties were experienced when the PIU was shifted from MOE to MCHE due to lack of office accommodation and logistics support. After several months of delay in the start-up process, the PIU, which comprised the rector and vice-rector of MCHE, started functioning. MOFT as the Executing Agency provided needed support to carry out the work. The Ministry of Public Works assisted in preparing the design and drawing for civil works, and provided supervision during construction. Despite a shortage of project staff, most activities were satisfactorily completed. The Government provided counterpart funds in a timely manner including incremental recurrent costs for MCHE. However, MCHE experienced substantial delays in liquidating the imprest account. Notwithstanding the delay in liquidation, the overall performance of the Executing Agency is rated satisfactory.

K. Performance of the Asian Development Bank

44. ADB conducted regular review missions during project implementation. Four ADB officers were responsible for the duration of the project cycle. ADB staff were responsive and tried to help the executing and implementing agencies resolve problems in particular relating to civil works, procurement of equipment, and implementation of consultant services. Wherever justified, approvals were provided. This included reallocation of loan proceeds, in particular to address the high cost overrun of civil works for MCHE. In general, ADB procedures and guidelines were used for the procurement and disbursement, and no major problems were encountered. Early resolution of the cofinancing issue and hands-on support for BME activities could have added value to the Project. Overall, ADB's performance is rated satisfactory.

III. EVALUATION OF PERFORMANCE²²

A. Relevance

45. The Project is considered "highly relevant." It clearly supported the Government's priorities to improve the quality and management of postsecondary education for the country's socioeconomic development. The project design addressed the main issues of quality, access, and efficiency of postsecondary education in the country. The rationalization of the seven existing institutes and centers of postsecondary education managed by different ministries under one umbrella organization and the establishment of MAB to conduct quality assurance

²² Independent Evaluation Department guidelines for using four core criteria for rating performance were used.

are the two most successful innovations of the Project. At completion, MCHE is a better organized institution that is providing leadership and strategic direction for the development of postsecondary education in the country.²³

B. Effectiveness in Achieving Outcome

46. The Project was “effective” in achieving its outcome. The Project contributed significantly to upgrade, rationalize, and modernize postsecondary education in the Maldives. Prior to the introduction of the Project, postsecondary education was fragmented and lacked appropriate direction and strategy. The establishment of MCHE and MAB, with MNQF on a strong professional footing, contributed significantly to achieving both the quality and quantity outcomes envisaged in the Project.

47. At project completion, MCHE capacity was strengthened to produce 2,708 diploma graduates, 5,370 certificate graduates, and 438 degree qualification holders, exceeding the outcome targets of the Project. During 2006–2008, the capacity of MCHE increased considerably to produce an average of 1,200 graduates, with females comprising nearly 60%, and graduates from atolls comprising 85%—exceeding the Project's original sector goal of 45% females and 50% students from atolls.

48. The capacity to coordinate postsecondary education administration was further strengthened through the establishment of an accreditation system in 2001. Extension services were operating by 2001 and foundation programs were successfully offered by 2002. A student dormitory and multipurpose study center was established in 2003 as envisaged. In short, all the targeted outcomes were achieved, though some of the achievements were delayed due to the 18-month delay in the start-up of project.

C. Efficiency in Achieving Outcome and Outputs

49. In terms of economic efficiency of achieving outcomes and outputs, the Project is rated “highly efficient.” The establishment of MCHE was found to be highly efficient. The establishment of a central administration for all faculties, including financial management and budgeting, student admission, and records, streamlined the procedures, eliminated the administrative burden of the faculties, and reduced transaction costs. This enhanced the efficiency of the system of postsecondary education in the country.

50. Comparing economic benefits and costs, the Project was analyzed to determine the economic rate of return (Appendix 8). Using the data and assumptions at completion, the Project yields an economic internal rate of return of 19%, which is slightly higher than the original estimate of 17%. Overall, in terms of achieving outcomes and outputs, the Project is rated “highly efficient.”

51. The creation of MAB and its adoption of the MNQF were handled in an efficient and professional manner. By bringing the private providers of skills training programs under the national qualification framework, MCHE has standardized the system efficiently. New curricula and course offerings were developed that are responding to economic and social demand.

²³ During the project completion review mission, the Government noted that it was drafting a bill to upgrade MCHE into a university with the existing eight affiliated faculties.

52. Most of the quality upgrading and capacity development activities, including staff development in Malé and outreach campuses, were achieved successfully and efficiently. The expected outcomes in some areas were not achieved (for example, the outcomes of CMS and COL were only partially achieved against the set targets). While the target for CMS appears overly optimistic, COL's targets could not be achieved mainly due to the unavailability of anticipated AusAID support.

53. In terms of implementation efficiency, the Project is rated "less efficient." While project outputs and outcomes were largely achieved, implementation of the Project was delayed by 3.5 years. The Project had two extensions, one for 12 months following the midterm review in 2003 and a second for 30 months at the request of the Government to offset the adverse effects of the tsunami disaster (para. 31). Notwithstanding the somewhat unrealistic implementation schedule devised at appraisal, the 3.5-year time overrun could have been reduced. Given the internal rate of return of 19%, the overall project efficiency rating could have been "highly efficient." However, due to substantial delays in implementation, the Project is rated only "efficient."

D. Preliminary Assessment of Sustainability

54. The Government demonstrated strong commitment to support the project institutions through regular budgetary provisions and the governing body, e.g., the college council comprising senior government officials as ex-officio members provides overall policy guidance to MCHE. The highly relevant and acceptable MCHE course offerings enjoy wide support in the country. MAB,²⁴ as the quality assurance agency, developed various faculties: education, engineering technology, health sciences, and management and computing; these are outstanding achievements in the context of Maldivian postsecondary education development. Not only was new and modern curricula developed under the project, but a systematic process was put in place across the faculties to develop, renew, and approve curricula. The project-initiated academic and training programs at foundation, diploma, and undergraduate levels are successful and graduates experience no difficulty in obtaining gainful employment in public or private sectors. Based on this, the Project is rated "likely sustainable."

E. Impact

55. The Project successfully restructured postsecondary education to increase educational opportunities for the domestic labor force. It also supported the establishment of MCHE, which embraces the current eight institutions of postsecondary education; a national quality assurance agency (MAB); and a national quality framework (MNQF). Together, they form a sound basis for development of tertiary education in the country. Within MCHE, a small critical mass will assist in leading the future directions of postsecondary education in the country. The Project also successfully strengthened institutional capacity to streamline postsecondary education and to effectively coordinate the quantity and quality of education and training programs.

56. By providing postsecondary education and training opportunities to the residents of distant islands and atolls through the operation of three regional campuses of MCHE, the Project supported the development of regional capacity and development. This will enhance poverty reduction through human capital formation and more equitable distribution of

²⁴ MCHE and MAB will be strengthened under an ongoing ADB-funded project. ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Maldives for the Employment Skills Training Project*. Manila (approved in November, \$6.0 million).

resources.²⁵ In addition, the foundation courses help provide opportunities for students who would not otherwise be able to continue higher education.

57. Quantitative data on the number of students enrolled and graduates produced in different course offerings shows that the sector goal was mostly exceeded. However, analysis of labor market data shows that the demand for expatriate workers in various occupations, including teachers and nurses, continues to outstrip the supply of the locally available workforce. This is mainly due to rapid expansion of the public education system at middle and secondary levels and health services across the atolls; in particular converting all community schools into secondary schools and establishing new hospitals and clinics. Despite this, the gap is slowly reducing in some occupations, for example expatriate teachers for primary and secondary schools (grades 1–10) accounted for 38% in 1998; this was reduced to 34% in 2007. Similarly, expatriate nurses comprised 44% of the workforce and paramedics 43% in 2006; however, due to commissioning of new hospitals and clinics, and recruitment of additional health workers, the corresponding numbers increased to 56% and 46% in 2007. Expatriate nurses comprise mostly senior staff nurse positions; the share of expatriates among junior nurses was only 7.8% in 2006, and about 1% in 2007.²⁶ This suggests that for junior nurses the gap was negligible by 2007. The rapid growth in the health and education sectors occurred due to the Government's policy changes in these two sectors and was not envisaged during appraisal.

58. With an average teacher–student ratio of 1:10, MCHE faculties are still far from reaching the project goal of a 1:20 teacher–student ratio indicating that staff resources may not be optimally used by international standards. On the other hand, in small island countries with a scattered population, social services may not be delivered efficiently as economies of scale will remain an issue. However, in meeting the demand, innovative ways to optimize the resources should be explored. In this context the current policy of a flat rate stipend to all students should be reviewed, ensuring that the neediest students are provided adequate financial assistance.

59. At appraisal, environmental implications were reviewed and no significant adverse environmental impacts were identified. During the construction of MCHE buildings and dormitory, the Project followed ADB's *Environmental Guidelines for Selected Infrastructure Development Projects*.²⁷ No resettlement, intensification of water pollution, or increase in resource pressure was experienced in Malé, and no safeguard issues arose during implementation.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

60. The Project is rated “successful.” The Project is found to be highly relevant, effective, efficient, and likely to be sustainable (Appendix 9). The Project was implemented as conceived and met or exceeded the original objectives. Two highly successful components or subcomponents of the Project include the establishment and operation of MCHE and MAB. The development of foundation courses, diploma programs, and new undergraduate programs,

²⁵ The Project complements the ADB-assisted Regional Development Project and Information Technology Development Project for the Maldives. ADB. 1999; *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Maldives for the Regional Development Project*. Manila; ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of the Maldives for the Information Technology Development Project*. Manila.

²⁶ Government of the Maldives, Ministry of Planning and National Development. 2008. *Statistical Yearbook of Maldives, 2008*. Malé.

²⁷ ADB. 1993. *Environmental Guidelines for Selected Infrastructure Development Projects*. Manila.

together with a sound mechanism for curriculum development, and a renewal and validation process, are some of the redeeming features of the Project at completion. Overall, the Project took longer than expected to complete but should provide sustainable benefits due to its good integration into the country's strengthened education and training system.

B. Lessons

61. **Front Loading and Advance Actions.** Delays in implementing initial activities, including setting up the PIU, were not anticipated. Further, the unfamiliarity of MCHE staff with procurement of goods and services was a major contributing factor to implementation delay. Consultancy support for the Implementing Agency on advance action in such matters (consultant recruitment, preliminary design and drawings, and identification of PIU staff) would have solved the problems encountered during the first 18 months.

62. **Dedicated Project Staff.** Early establishment of an adequately staffed PIU is important, especially in a subsector without prior experience of externally funded projects. An adequately staffed PIU could be a condition of loan effectiveness or disbursement, as appropriate. Where full-time staff for a PIU cannot be committed, recruitment of project implementation consultants should be considered.

63. **Cofinancing Arrangements.** The AusAID financing was not finalized during appraisal or afterward. In future, if the cofinancing arrangement is not finalized before approval of a project, ADB needs to take a more conservative approach in project design and should not include cofinancing for project scoping and costing. In the event of cofinancier's withdrawal from the Project, as a safeguard, related components should have been covered by ADB or Government funding to preserve the integrity of project design.

64. **Government and Stakeholder Ownership.** The ownership of the Government is visible as it continued to provide increased funding to MCHE after completion. All key stakeholders are proud of the MCHE achievements as it successfully delivered the majority of the outputs and met their expectations.

65. **Benefit Monitoring and Evaluation.** The status of BME needs to be regularly followed up, and if BME is covenanted in the project documents, then it needs to be followed up more rigorously for compliance purposes. To be meaningful, BME should be integrated into an existing national monitoring system such as the Statistical Office under the Ministry of Planning and National Development.

66. **Time Frame and Institutional Capacity.** The standard time frame of 5 years to implement projects is not realistic especially in social sector projects in a country where capacity must be built before implementing reforms and innovative actions. Technical assistance should be provided for capacity development before introducing new initiatives and reforms.

C. Recommendation

1. Project-Related

67. **Future Monitoring.** MCHE should initiate BME-related activities. In particular, regular tracer studies should be conducted to obtain feedback from the alumni and employers. Based on the tracer studies results, new course programs may be devised and existing course offerings revised or discontinued as appropriate aiming at optimizing resource capacity.

68. **Admission into Higher Education.** The rigid entry requirements in terms of the number of O and A level subjects for certificate, diploma, and undergraduate academic programs can exclude many students, especially those from the atolls who may be academically ready but did not perform well in the examinations. MCHE should consider reviewing this admission criteria against the minimum standards expected from students, taking into consideration the results and their observations from their foundation courses. Where appropriate, an adjustment of the entry requirements should be taken.

69. **Admission into Short-Term Skills Training Courses.** Depending on the skills training course, some programs may require only literacy and numeracy. In these programs, MCHE should consider dropping the requirement of primary education completion.

70. **Targeted Support and Cost Recovery.** Currently most faculties do not charge any tuition fees; in addition, many students get a monthly stipend. While financially disadvantaged students or those from atolls deserve adequate support, a loan scheme for eligible students studying more marketable programs with higher returns could be considered initially as a pilot.

71. **Information and Communication Technology in Education.** Given the dispersed population in the atolls, distance learning could be an effective means of delivering education services by using information and communication technology. The country already has this infrastructure connected to remote atolls; hence, information and communication technology could be a useful tool, especially to train teachers in remote atolls.

72. **Policy of Reducing the Expatriate Labor Force.** MCHE may consider devising a realistic plan and strategy to respond to the Government's policy of gradually reducing dependence on expatriate workers, especially in sectors where MCHE has a comparative advantage—education, health services, tourism and hospitality, and financial and business services.

73. **Covenants.** In general, covenants in the loan and project agreement can be maintained in their existing form. However, in view of the nonavailability of the AusAID grant, the covenant related to the grant could be waived or revised as appropriate. MOFT failed to comply with the requirement of evaluating the benefits of the Project after project completion. In view of MOFT's cooperation extended to the project completion review mission by providing data and access to documents the second covenant that was not complied with may also be appropriately waived or revised.

74. **Additional Assistance.** TA may be considered to consolidate MCHE's gains and help MCHE implement the recommended actions. This would contribute to enhancing MCHE capacity.

75. **Timing of the Project Performance Evaluation Report.** The review for preparing the project performance evaluation report could be undertaken in early 2011.

2. General

76. Sound sector and labor market analysis should be conducted prior to designing a viable postsecondary education project with realistic performance indicators. The design should also take into account the special features of the country including the role of the expatriate labor force.

77. A realistic time frame should be devised for project implementation taking into consideration the capacity of sector institutions. In addition, risks involved in parallel financing or cofinancing should be analyzed and appropriate safeguards built in the project design.

78. Project readiness of the sector institutions and executing agency should be carefully analyzed and appropriate measures adopted prior to approval of the project.

PROJECT FRAMEWORK

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
<p>1. Sector Goal</p> <p>Restructure postsecondary education to</p> <p>(i) Increase educational opportunities by developing domestic rather than international educated skilled labor to reduce the current account deficit due to factor payments to expatriate labor</p>	<p>Expatriate remittances as % of gross domestic product remain at 11% or less</p> <p>Expatriate salaries as a % of current expenditure remain at 5% or less</p> <p>Number of skilled expatriate teachers and nurses per year (minimum of 60 teachers and 60 nurses per year) by the end of the Project</p> <p>Percentage of female and atoll-based applicants to, and graduates from, postsecondary education (45% female, 50% from atolls by 2004)</p> <p>Number of private sector partnerships with postsecondary institutes (tourism, maritime training, management)</p>	<p>No published figures are available for overseas remittances from reliable sources.</p> <p>As a result of rapid economic growth and declining population growth, the number of expatriates in the country has tripled since the Project began. This is a new environment that was not identified at project design.</p> <p>At project completion, annual output of teachers with diploma and bachelor qualifications to teach at primary and secondary schools is 186, and nurses is 100. Achievements exceed the target.</p> <p>Percentage of female graduates is more than 60% and percentage of students from atolls is more than 85% of the total.</p> <p>Faculty of Hospitality and Tourism Studies (FHTS), Faculty of Engineering Technology (FET) and Centre for Maritime Studies (CMS) have linkages with employers who offer employment to their graduates upon completion of training.</p>	<p>Pressure increased to reduce the percentage of gross domestic product (GDP) going to expatriate remittances and percentage of current expenditures spent on salaries for foreign nationals.</p> <p>Local human capital is sufficient to manage the postsecondary subsector during project implementation.</p> <p>Maldives College of Higher Education (MCHE) and related institutions have sufficient capacity to mobilize extension services in the atolls.</p> <p>Open university programs brought education into the home.</p> <p>Government committed to the rationalization and development of an efficient postsecondary education system including MCHE.</p>
<p>(ii) Strengthen institutional capacity to streamline postsecondary education, and to coordinate the quantity and quality of programs</p>	<p>Establish MCHE and the Accreditation Board.</p> <p>Teacher–student ratio from 1:10 in 1996 to 1:20 in 2004</p>	<p>MCHE was established in 1999 and Maldives Accreditation Board (MAB) was established in 2002.</p> <p>Overall teacher–student ratio remains at 1:10, although it varies slightly between the faculties.</p>	<p>Sufficient qualified applicants are available.</p> <p>Training places in the atolls and/or access to courses in Malé is sufficient.</p> <p>The accreditation board was established and an equivalency</p>

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
	<p>40 percent of all self-financing certificate and diploma courses offered annually are self-financing by 2004</p> <p>Out-of-country university linkages with each institute in MCHE</p>	<p>No courses are totally self-financing. The Government did not consider this to be a socially desirable or achievable goal</p> <p>Except for FET, links were developed with overseas universities. FET programs are generally subdegree courses catering to the immediate needs of the private and government sectors and are generally competency-based.</p>	<p>system developed.</p> <p>MCHE was able to develop partnerships with out-of-country universities.</p>
<p>2. Objectives or Purpose</p> <p>(i) Capacity building of postsecondary institutes^a to double the number of certificate and diploma graduates through quality improvement of staff, programs, and learning materials</p>	<p>Number of advanced diploma graduates (from 1,000 to 2,000 by 2004—45% female)</p> <p>Number of certificate graduates (from 1,500 to 3,000 by 2004—45% female)</p> <p>Number of staff with degree qualification or higher (130–165 by 2004—35% female)</p> <p>Number of atoll outreach programs established for Centre for Open Learning (COL), Faculty of Education (FE), FET and Faculty of Health Science (FHS) by 2001</p>	<p>Number of diploma graduates at project closing increased to 3,167, with more than 60% female.</p> <p>Number of certificate graduates at project closing increased to 4,937, with more than 50% female.</p> <p>In 2009, 107 of the 146 academic staff have bachelor degree and above qualifications, i.e., 73%. In 2006, this was 108 out of 143 or 76%.</p> <p>Atoll outreach program are established in three MCHE campuses: Khulhudhuffshee, Thinadhoo, and Hithadhoo.</p> <p>Some 100 islands were designated as study centers and the advanced certificate in primary teaching is offered in these islands.</p>	<p>Budget and staff were easily shifted across institutes.</p> <p>Number of atoll applicants to postsecondary meet examination qualifications.</p>
<p>(ii) Institutional development of MCHE to coordinate postsecondary education administration, academic admissions and standards, student affairs, and foundation and extension programs</p>	<p>MCHE administration and accreditation board operating by December 1999</p> <p>Extension services operating, including open university programs by 2001</p> <p>Foundation program operating by May 1999</p> <p>Student dormitory and multipurpose study center functioning by 2001</p>	<p>Administration and accreditation is fully implemented freeing faculties from administrative overloads. MAB has fully accredited all long-term courses.</p> <p>Extension services are in operation. Already two courses have been delivered in this mode</p> <p>Foundation studies are offered since 2001 enabling thousands of students to gain admission to the college through their use.</p> <p>Dormitory and study center fully functional. Thousands of students have benefited.</p>	<p>MCHE maintained entry qualifications by providing foundation courses.</p> <p>Government committed to extension services in the atolls.</p> <p>Employers accepted quality of diploma qualifications vis-à-vis expatriates.</p>

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
Facilities and instructional materials upgrade for diploma and outreach courses	FMC: Curriculum for management, accounting, foundation course	Foundation course successfully established. Management and accounting courses are now offered in the new curriculum.	Two regional fellowship recipients completed overseas studies on time.
	FHTS: Foundation courses	All programs redesigned and developed as recommended by the respective consultants. Cookery and pastry course designed and developed under the Project.	
	FHTS: Foundation courses	FHTS foundation course was integrated into the college foundation studies program.	
	FET: Foundation courses, mobile training for atolls vocational training centers	Diploma and advanced diploma in following areas are being offered : electrical and electronics engineering; mechanical engineering; civil engineering; architecture and short courses on fluid power	
	FET: Foundation courses, mobile training for atolls vocational training centers	Degree program in architecture developed	
	FET: Foundation courses, mobile training for atolls vocational training centers	Curriculum in marine engine developed	
	CMS: Curriculum in marine engines, foundation courses	The curriculum is ready but the course has not started because the fee, nearly \$1,100 for the course, is considered too high. Fee revision is being considered.	
	COL: Distance education, Atoll Development Center in Seenu	Distance education courses: advanced certificate in primary teaching and English for further study conducted in three campuses and 17 other centers	
MCHE: Monitoring, evaluation of outreach training	A system of student data collection using Power Campus, the management information system, was initiated. All student data are now readily available.		
FHS: 2 classrooms with furniture and equipment in regional hospitals	Classrooms built attached to two regional hospitals. Requested to make funds available to develop a larger building in Hdh. Kulhudhuffushi campus.		
FHTS: Kitchen equipment, and computing system upgrade for students	FHTS kitchen equipment and computers acquired for students		

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
	<p>FET: Mobile marine instruction workshop</p> <p>CMS: Computers and simulation software, marine engine demonstration equipment</p> <p>COL: Multimedia equipment</p> <p>MCHE: Multimedia language laboratory, library access, and computer system, reference materials</p>	<p>FET scope changed and supported equipment for courses developed through the Project. Electrical and electronics, architecture, building construction, welding and sheet metal and electrical courses.</p> <p>CMS navigation simulator purchased and installed with automatic radar plotting aids radar system</p> <p>Multimedia equipment including server and computers were procured.</p> <p>2 Multimedia laboratories were developed, library software purchased</p> <p>EBSCO database used in MCHE and all its libraries. Many books procured for central library</p>	<p>CMS recurrent budget was available.</p> <p>COL staff and budget were increased.</p> <p>Government negotiated with private sector providers that allowed "educational" access charges for internet use.</p>
<p>B. Institutional Capacity of Sector</p> <p>MCHE facilities, furniture, equipment, operation and maintenance</p> <p>Multipurpose (language and computer laboratories, library, student study center, administration offices, lecture, theater) and dormitory (rooms, toilets, common cooking and washing) facilities, and furniture</p>	<p>Multipurpose building and dormitory operating by July 2001</p> <p>Language and computer laboratory, student study center, and lecture theater operating by July 2001</p>	<p>Central administration building operating (The building was completed in 2005). Dormitory "Majudhudheen Dhanaal" is built and made functional.</p> <p>Language and computer laboratory, student center, and lecture theater operating in 2005.</p>	<p>Government and MCHE ensure that counterpart staff were available.</p> <p>Architectural plans adapted to MCHE needs.</p> <p>Government provided recurrent cost and operation and maintenance.</p>
<p>1. MCHE Programs</p> <p>Establishment of accreditation and academic standards boards including consultant support to develop accreditation and course equivalency standards across the institutes, common foundation courses, link programs with out-of-country universities, and graduation accreditation.</p>	<p>Accreditation board operating by September 1999</p> <p>COL building ready and staff trained by April 2000</p> <p>Open university programs for postsecondary staff operating by December 2000; for atoll applicants by December 2001</p> <p>Foundation courses in English were operating by</p>	<p>Accreditation board was formed in 2002</p> <p>COL was given a premise in 2001. Staff have been trained.</p> <p>Open learning programs were initiated. The first successful program was an advanced certificate in teaching (primary) for atoll students. Some 1,000 students had enrolled in the course. In addition, Indira Gandhi National Open</p>	<p>Proficiency in English and mathematics remained barriers to admission.</p> <p>Students were available to undertake preparatory study.</p> <p>Quality in-country programs were developed and recognized by out-of-country universities.</p> <p>Open university programs and materials were of sufficient quality to attract Maldivians.</p>

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
<p>Support COL to train and develop open university system in Malé and the atolls, and establish overseas open university link programs</p> <p>Student affairs (dormitory and multipurpose student center activities) including</p> <ul style="list-style-type: none"> (i) language laboratory to support foundation studies in English language learning for entry into postsecondary school programs (ii) computerization of library facilities across campuses along with access to library materials; and (iii) student study center and dormitory services <p>2. Project Implementation</p>	<p>July 1999</p> <p>COL and one regional center operating by 2000</p> <p>Dormitory operating by 2001</p> <p>MCHE facilities functional by 2001</p>	<p>University and COL have signed a memorandum of understanding (MOU). The certificate program benefited from this MOU.</p> <p>Foundation course levels I and II were started in 2004.</p> <p>COL operating and conducts programs in three campuses and 14 other atoll centers.</p> <p>Dormitory operating since 2004</p> <p>MCHE College Administration new building began operations in 2005.</p>	<p>Government and MCHE provided security, care, and maintenance</p> <p>Construction completed on time.</p> <p>Government appointed permanent staff.</p> <p>Government maintained equipment and funds for ongoing mobile teaching delivery.</p>
<p>Support day-to-day project operations and support for MCHE</p>	<p>Fellowships completed by December 2003</p> <p>Consultants fielded by January 2000</p> <p>Equipment procured by December 2000</p>	<p>Fellowships were supported and completed by 2007.</p> <p>All consultants were fielded during 2003–2005)</p> <p>Consultancies included following areas</p> <ul style="list-style-type: none"> (i) academic standards and qualifications, (ii) management information system, (iii) student administration and welfare, (iv) planning and coordination, (v) academic standards (vi) library information resources, (vii) outreach coordination and methodology, (viii) graduation placement and tracer study, (ix) tertiary teaching methods, and (x) college finance <p>Equipment procured throughout the project implementation period.</p>	<p>Project implementation unit (PIU) staff stayed with the Project until completion</p>

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
<p>3. Activities Quality Upgrading of Institutions^c</p> <p>Staff Development International fellowships Regional consultations (27 visits)</p> <p>Curriculum Specialists Faculty of Management and Computing (FMC) Engineering (FET) Maritime studies (CMS) Master trainers in English (FE) Regional nurses training (IHS) Vocational education upgrading (FET)</p>	<p>Graduate (15) Degree (22)</p> <p>Diploma courses offered after completion of curriculum upgrading</p>	<p>Graduate (15) Degree (22)</p> <p>Regional consultations were carried out (27)</p> <p>Following courses were developed and offered in the faculties and centers:</p> <ul style="list-style-type: none"> (i) foundation English, (ii) foundation mathematics, (iii) BA English language, (iv) advanced diploma and diploma in electric and electronic engineering, (v) diploma in mechanical engineering, (vi) diploma in civil engineering, (vii) diploma in construction management, (viii) diploma in civil engineering, (ix) curriculum integration (health studies), (x) foundation mathematics, (xi) diploma in architecture, (xii) outreach coordination and methodology, (xiii) Rural Youth Vocational Training Centre Cur. articulation, (xiv) cookery and pastry course development, (xv) fluid power course development, and (xvi) Bachelor of Science and advanced diploma in architecture 	<p>Consultants produced curriculum acceptable to the Government.</p>
<p>4. Equipment, Materials, Civil Works, Incremental Cost</p> <p>Two classrooms Learning materials Marine mobile training vessel</p> <p>C. Institutional Capacity Building</p> <p>1. Civil works, furniture, equipment, recurrent cost: (i) MCHE</p>	<p>Procurement completed by December 2001</p> <p>Buildings operating by December 2000</p>	<p>Classrooms built Learning materials procured Marine mobile vessel was changed to procure other equipment for FET</p> <p>MCHE central administration building functional by 2005 MCHE dormitory for 100 students built and functional in</p>	<p>Faculties (institutes) provided with sufficient incremental recurrent costs.</p> <p>Contracting proceeded smoothly.</p>

Project Design	Project Targets (verifiable indicators)	Achievements	Assumption and Risk
<p>multipurpose building (ii) MCHE student dormitory up to 100 students</p> <p>2. Consultants to help develop budget and finance, management and administration, library learning resources, and student welfare accreditation and admissions, atoll outreach, and external resources</p> <p>3. MCHE Program</p> <p>COL in Malé to include consultants, fellowships, and equipment to operationalize open university programs with out-of-country universities, establish one branch of the learning center in the atolls</p> <p>4. PIU to administer civil works, procurement, staff development, staff consultants, and project finances</p>	<p>Coordination of more than 20 international consultants</p> <p>Complete 15 open university scholarships for postsecondary school staff</p> <p>COL and one branch operating</p> <p>PIU operating by January 1999</p>	<p>2005.</p> <p>Coordination tasks were successfully undertaken and the consultants produced the deliverables</p> <p>Open university scholarships not accomplished. AusAID funds not available.</p> <p>COL operating in 3 campuses and 14 other centers established in the atolls.</p> <p>PIU was not separately established. It was integrated into MCHE</p>	<p>Contracting proceeded smoothly.</p> <p>Open university plan was adopted quickly.</p> <p>Government would organize local staff on time.</p>

CMS = Centre for Maritime Studies, COL = Centre for Open Learning, FET = Faculty of Engineering Technology, FHS = Faculty of Health Science, FHTS = Faculty of Hospitality and Tourism Studies, FMC = Faculty of Management and Computing, IHS = Institute of Health Sciences, MAB = Maldives Accreditation Board, MCHE = Maldives College of Higher Education, PIU = project implementation unit.

^a During implementation, institutes and centers were renamed as follows:

Institute of Hotel and Catering Services (IHCS)—Faculty of Hospitality and Tourism Studies (FHTS)

Institute of Health Sciences (IHS)—Faculty of Health Sciences (FHS)

Institute of Islamic Studies (IIS)—Faculty of Shariah and Law (FSL)

Institute of Management Administration (IMA)—Faculty of Management and Computing (FMC)

Institute of Teacher Education (ITE)—Faculty of Education (FE)

Maldives Institute of Technical Education (MITE)—Faculty of Engineering and Technology (FET)

Maritime Training Center (MTC)—Centre for Maritime Studies (FMC)

Tertiary Institute for Open Learning (TIOL)—Centre for Open Learning (COL)

^b Proposed AusAID-funded training programs did not materialize; therefore these are excluded.

^c Planned AusAID-funded activities did not materialize; these are deleted from the Project.

Source(s) Project Implementation Unit Record

STAFF DEVELOPMENT BY TYPE OF TRAINING AND SPONSORSHIP
Postsecondary Education Institutions
Overseas and In-Country Training Places for Staff
(Number of Staff Trained)

Type of Training	Appraisal										Actual									
	IHS		TIOL		IHCS	IMA	ITE	MCHE	MITE	MTC	FHS		COL		FHTS	FMC	FE	MCHE	FET	CMS
	Other AusAID	Project	Other AusAID	Project							Other AusAID	Project	Other AusAID	Project						
A. Postgraduate																				
1. Overseas	9	2						2						01		02				02
2. In-country					9									06						
B. Bachelor Degree																				
1. Overseas			3			2	2					04		05	02	02			01	
2. In-country			5											07						
C. Associate Diploma																				
1. Overseas			2																	
2.. In-country			5																	
D. Higher Diploma																				
1. Overseas										2										01
2. In-country																				
E. Diploma																				
1. Overseas	5																			
2. In-country																				
F. Regional Study Consultations																				
		1		1	4	3	1	13	2	2		03		04	03	05	17	03	02	
G. Open Learning	15 + In-country open learning fellowships available through the Project for staff development and training										As cofinancing for TIOL did not materialize there was no link established with an open university and thus these courses did not materialize.									

AusAID = Australian Agency for International Development

MCHE = Maldives College of Higher Education

During implementation Institutes/Centers were renamed as follows:

Institute of Hotel and Catering Services (IHCS) – Faculty of Hospitality and Tourism Studies (FHTS)

Institute of Health Sciences (IHS) – Faculty of Health Sciences (FHS)

Institute of Islamic Studies (IIS) – Faculty of Shariah and Law (FSL)

Institute of Management Administration (IMA) – Faculty of Management and Computing (FMC)

Institute of Teacher Education (ITE) – Faculty of Education (FE)

Maldives Institute of Technical Education (MITE)– Faculty of Engineering and Technology (FET)

Maritime Training Center (MTC) – Center for Maritime Studies (FMC)

Tertiary Institute for Open Learning (TIOL) – Center for Open Learning (COL)

Source: Project Management Office Implementing Agency Record

GRADUATE OUTPUTS, 1999–2007

**Table A3.1 Maldives College of Higher Education
Summary of Graduates by Certificate, Diploma, Degree, and by Gender and Geographic Origin**

Year	Certificate					Advanced Certificate					Diploma					Advanced Diploma					Degree					TOTALS				
	M	F	Total	M%	F%	M	F	Total	M%	F%	M	F	Total	M%	F%	M	F	Total	M%	F%	M	F	Total	M%	F%	M	F	Total	M%	F%
1999			433					14					170																787	
2000			809					11					76																972	
2001			640					0					214										52						1120	
2002	315	232	547	57.59	42.41			0			67	151	218	30.73	69.27	15	3	18	83.33	16.67	5	5	10	50	50	402	391	793	50.69	49.31
2003	200	65	265	75.47	24.53	70	134	204	34.31	65.69	107	151	258	41.47	58.53	8	18	26	30.77	69.23	26	23	49	53.06	46.94	411	391	802	51.25	48.75
2004	52	24	76	68.42	31.58	135	129	264	51.14	48.86	94	158	252	37.30	62.70	10	9	19	52.63	47.37	9	6	15	60	40	300	326	626	47.92	52.08
2005	53	65	118	44.92	55.08	192	248	440	43.64	56.36	163	280	443	36.79	63.21	8	7	15	53.33	46.67	26	44	70	37.14	62.86	442	644	1086	40.70	59.30
2006	39	45	84	46.43	53.57	158	227	385	41.04	58.96	203	353	556	36.51	63.49	5	1	6	83.33	16.67	35	95	130	26.92	73.08	440	721	1161	37.90	62.10
2007	62	71	133	46.62	53.38	181	333	514	35.21	64.79	166	257	423	39.24	60.76	4	10	14	28.57	71.43	25	87	112	22.32	77.68	438	758	1196	36.62	63.38
2008	83	69	152	54.61	45.39	193	255	448	43.08	56.92	144	315	459	31.37	68.63	0	10	10	0.00	100.00	34	73	107	31.78	68.22	454	722	1176	38.61	61.39

F = Female, M = Male

Note: Prior to the establishment of Maldivian Accreditation Board under the Project, there is no system of classification of graduates according to gender.

	Malé	Atoll	Unknown	Total	% Male'	% Atol	% Unknown
2004	79	503	44	626	12.62	80.35	7.03
2005	151	788	147	1086	13.9	72.56	13.54
2006	149	1009	3	1161	12.83	86.91	0.26
2007	113	1080	3	1196	9.45	90.3	0.25
2008	117	1039	20	1176	9.95	88.35	1.7

Note: Prior to the establishment of Maldivian Accreditation Board under the Project, there is no system of classification of students by gender.

Source: Project Implementation Unit record.

**Table A3.2: Maldives College of Higher Education
Students Graduated By Geographic Origin**

(number of students)

Year	Malé	Atoll	Unknown ^a	Total	% Malé	% Atoll	% Unknown ^a
2004	79	503	44	626	12.62	80.35	7.03
2005	151	788	147	1,086	13.90	72.56	13.54
2006	149	1,009	3	1,161	12.83	86.91	0.26
2007	113	1,080	3	1,196	9.45	90.30	0.25
2008	117	1,039	20	1,176	9.95	88.35	1.70

^a Atoll of permanent address not in record.

Sources: Project Management Office Implementing Agency Record

**Table A3.3: Faculty of Education
(number of graduates)**

Year	Course				Total Graduates	Male	Female
	Foundation	Certificate	Diploma	Degree			
1999	0	160	14	0	174	56	118
2000	0	169	9	0	178	43	135
2001	0	129	15	0	144	36	108
2002	0	157	23	0	180	43	137
2003	0	46	103	6	155	24	131
2004	0	68	118	17	203	62	141
2005	0	111	269	50	430	139	291
2006	0	91	347	119	557	138	419
2007	0	60	222	108	390	94	294
Total	0	991	1,120	300	2,411	635	1,774

Sources: Project Management Office Implementing Agency Record

**Table A3.4: Faculty of Shariah and Law
(number of graduates)**

Year	Course				Total Graduates	Male	Female
	Foundation	Certificate	Diploma	Degree			
1999	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0
2002	0	40	3	0	43	41	2
2003	0	11	1	0	12	11	1
2004	0	0	2	9	11	6	5
2005	0	0	0	13	13	7	6
2006	0	0	0	11	11	4	7
2007	0	0	0	9	9	4	5
Total	0	51	6	42	99	73	26

Sources: Project Management Office Implementing Agency Record

Table A3.5: Faculty of Health Sciences—For All Courses Conducted
(number of graduates)

Year	Foundation	Certificate	Diploma	Degree	Total Graduates	Male	Female
1999	0	55	7	0	62	9	53
2000	0	76	19	0	95	14	81
2001	0	54	13	0	67	12	55
2002	0	157	74	0	231	35	196
2003	0	41	162	0	203	32	171
2004	0	96	79	0	175	23	152
2005	0	115	61	7	183	21	162
2006	0	75	57	0	132	10	122
2007	0	120	65	13	198	17	181
Total	0	789	537	20	1,346	173	1173

Sources: Project Management Office Implementing Agency Record

Table A3.6: Faculty of Health Sciences—For All Nursing Courses Conducted
(number of graduates)

Year	Foundation	Certificate	Diploma	Degree	Total Graduates	Male	Female
1999	0	23	7	0	30	0	30
2000	0	17	17	0	34	0	34
2001	0	31	5	0	36	0	36
2002	0	26	58	0	84	0	84
2003	0	83	16	0	99	0	99
2004	0	48	59	0	107	0	107
2005	0	50	32	7	89	0	89
2006	0	46	30	0	76	0	76
2007	0	54	33	13	100	1	99
Total	0	378	257	20	655	1	654

Sources: Project Management Office Implementing Agency Record

Table A3.7: Faculty of Engineering Technology—Including Short-Term Courses
(number of graduates)

Year	Short Courses	Certificate	Diploma	Degree	Total Graduates	Male	Female
1999	88	103	0	0	191	188	3
2000	85	56	0	0	141	137	4
2001	341	133	0	0	474	470	4
2002	468	96	0	0	564	563	1
2003	327	154	0	0	481	477	4
2004	760	82	6	0	842	842	0
2005	401	74	15	0	475	473	2
2006	106	88	15	0	194	181	13
2007	124	111	25	0	235	228	7
Total	2,700	897	61	0	3,597	3,559	38

Sources: Project Management Office Implementing Agency Record

Table A3.8: Faculty of Engineering Technology—Long-Term Courses
(number of graduates)

Year	Short Courses	Certificate	Diploma	Degree	Total Graduates	Male	Female
1999		103	0	0	103	103	0
2000		56	0	0	56	56	0
2001		133	0	0	133	129	4
2002		96	0	0	96	95	1
2003		154	0	0	154	150	4
2004		82	6	0	82	82	0
2005		74	15	0	74	72	2
2006		88	15	0	88	88	0
2007		111	25	0	111	108	3
Total		897	61	0	897	883	14

Sources: Project Management Office Implementing Agency Record

Table A3.9: Centre for Maritime Studies
(number of graduates)

Year	Foundation	Certificate	Diploma	Degree	Total Graduates	Male	Female
1999	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0
2001	3,710	0	0	0	3,710	3,670	40
2002	3,257	0	0	0	3,257	3,219	38
2003	2,014	22	0	0	2,036	2,008	28
2004	2,230	17	0	0	2,247	2,212	35
2005	1,034	13	0	0	1,047	1,035	12
2006	910	15	0	0	925	915	10
2007	1,095	3	0	0	1,098	1,083	15
Total	14,250	70	0	0	14,320	14,142	178

Sources: Project Management Office Implementing Agency Record

Note: Data on graduates from COL and FMC will be provided by MCHE once collected.

COST SUMMARY BY CATEGORY OF EXPENDITURE

(\$ million)

Component	Appraisal Estimates				Actual Expenditures			
	ADB	Cofinancing	Government	Total	Bank	Cofinance	Government	Total
Base Cost								
1. Strengthening of Existing Institutes								
a. Civil Works	0.1	0.0	0.2	0.2	0.066	0.000	0.020	0.086
b. Equipment and Materials	0.4	0.2	0.2	0.8	1.362	0.000	0.140	1.502
c. Staff Development	1.1	0.9	0.3	2.3	0.656	0.000	0.270	0.926
d. Consulting Services	0.2	0.6	0.0	0.8	0.248	0.000	0.130	0.378
e. Incremental Recurrent Costs	0.0	0.0	0.7	0.7	0.017	0.000	2.180	2.197
2. Capacity Building (Maldives College of Higher Education)								
a. Civil Works	1.5	0.0	0.0	1.5	1.851	0.000	0.010	1.861
b. Equipment and Materials	0.6	0.0	0.1	0.7	1.389	0.000	0.190	1.579
c. Staff Development	0.3	0.0	0.2	0.5	0.086	0.000	0.010	0.096
d. Consulting Services	0.8	0.0	0.3	1.0	0.644	0.000	0.130	0.774
e. Incremental Recurrent Costs	0.2	0.0	0.3	0.5	0.013	0.000	0.450	0.463
f. Project Implementation	0.3	0.0	0.1	0.3	0.000	0.000	0.120	0.120
3. Interest					0.108			0.108
Total	5.26	1.70	2.20	7.46^a	6.438	0.000	3.650	9.823

^a The anticipated AusAID grant did not materialize thereby decreasing the total appraisal estimated cost by \$1.7 million.
Source: ADB estimates and Project Implementation Unit Record

ANNUAL DISBURSEMENT BY CATEGORY

(\$ million)

	1998			1999			2000			2001			2002			2003		
	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total
Civil Works	-	-	-	0.015	-	0.015	-	-	-	-	-	-	0.583	0.01	0.59	0.681	0.01	0.69
Equipment and Materials	-	-	-	-	0.01	0.01	-	-	-	0.056	0.062	0.12	0.257	0.04	0.30	0.236	0.05	0.29
Staff Development (Overseas)	-	-	-	-	0.10	0.10	-	-	-	0.129	0.019	0.147	0.121	0.02	0.14	0.081	0.01	0.09
Staff Development (Local)	-	-	-	-	-	-	-	-	-	0.014	-	0.014	0.067	-	0.067	0.070	-	0.070
Consulting Services	-	-	-	0.100	-	0.100	-	-	-	-	-	-	0.154	0.04	0.19	0.494	0.07	0.57
Incremental Recurrent Costs (MCHE)	-	-	-	0.010	-	0.010	-	-	-	-	-	-	-	-	-	0.006	0.31	0.32
Project Management	-	-	-	0.010	-	0.010	-	-	-	-	-	-	-	-	-	-	-	-
Service Charge	-	-	-	0.010	-	0.010	0.002	-	0.002	0.002	-	0.002	0.004	-	0.004	0.020	-	0.020
Total	-	-	-	0.010	0.11	0.117	0.002	-	0.002	0.201	0.08	0.281	1.187	0.11	1.29	1.588	0.46	2.048

	2004			2005			2006			2007			TOTAL
	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total	ADB	Gov't	Total	
Civil Works	0.519	0.03	0.55	0.003	0.02	0.02	0.066	-	0.066	0.050	-	0.050	2.0
Equipment and Materials	0.114	0.06	0.17	0.595	0.09	0.68	0.426	0.05	0.47	1.060	0.02	1.08	3.1
Staff Development (Overseas)	0.016	0.01	0.02	0.061	0.10	0.16	0.043	0.03	0.08	-	0.04	0.04	0.8
Staff Development (Local)	0.007	-	0.007	0.003	-	0.003	-	-	-	-	-	-	0.2
Consulting Services	0.081	0.02	0.10	0.050	-	0.050	0.002	-	0.002	0.009	0.03	0.04	1.0
Incremental Recurrent Costs (MCHE)	0.007	0.61	0.62	0.013	0.92	0.93	0.003	0.52	0.53	0.000	0.33	0.33	2.7
Project Management	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Service Charge	0.034	-	0.034	0.042	-	0.042	0.004	-	0.004	-	-	-	0.1
Total	0.778	0.729	1.507	0.768	1.123	1.891	0.545	0.601	1.146	1.120	0.427	1.547	9.8 ^a

MCHE = Maldives College of Higher Education

^a This excludes the disbursed amount of \$ 200,000 allocated to the Tsunami Emergency Assistance Project.

Source: Asian Development Bank and Project Management Office.

STATUS OF COMPLIANCE WITH LOAN COVENANTS

Project Specific Covenants / Reference in Loan Agreement	Due Date	Status/Remarks
Sector		
1. Schedule 6, para. 4(a): The Borrower shall ensure that the Maldives College of Higher Education (MCHE) commences operations as from 1 October 1998. The MCHE shall consolidate and coordinate the administration and academic programs of postsecondary education of the Institutes and any other institute as may be added by the Borrower. Specifically, the MCHE shall be responsible for admissions, accreditation, budgeting, planning, monitoring, student affairs, foundation studies, atoll extension services, and establishing external linkages with foreign institutions in order to meet international accreditation standards.	1 October 1998	Complied with.
2. Schedule 6, para. 4(b): Upon commencement of the MCHE's operations, the Borrower shall cause the MCHE to be headed by a full-time Principal (MCHE Principal) at all times to ensure its proper functioning. Within one year after the Effective Date, the Borrower shall appoint two Vice-Principals (a Vice-Principal for academic affairs and a Vice-Principal for administration) in the MCHE.	20 May 2000	Complied with.
3. Schedule 6, para 4(c): Within two years after the Effective Date, the Borrower shall (i) cause the MCHE facilities to be constructed and operational; (ii) cause MCHE to appoint a librarian and a multimedia specialist; and (iii) hire two staff (one male and one female) to supervise the student dormitory to be established under the Project.	20 May 2001	Complied with. MCHE CAB was fully operational by 1 January 2006, though foundation studies had been relocated there since July 2005. Administration of the college libraries was consolidated and a head (chief librarian) appointed on 1 April 2005. Four security staff, four cleaners, 1 secretary, and 1 warden were appointed in July 2004.
4. Schedule 6, para. (d): The Borrower shall cause the MCHE to be governed by a National Council for Higher Education (the National Council). The National Council shall be a policy-making body to manage and coordinate postsecondary institutes in the country, including formulating academic and administrative policies of the MCHE. The National Council shall include the ministers currently responsible for governing the Institutes and other officials as may be appointed by the Borrower.		Complied with. The National Council is recommended to meet more frequently.
5. Schedule 6, para 4(e): The Borrower shall also cause the MCHE to be governed by a College Council, which shall include representatives from the private sector and the ministries currently responsible for governing the Institutes. The College Council shall oversee the operations and management of the MCHE.		Complied with. The College Council meets weekly.
6. Schedule 6, para. 4(f): Within one year after the Effective Date, the Borrower shall cause the MCHE to establish a postsecondary Accreditation Board (MCHE Accreditation Board) and an Academic Board (MCHE Academic Board). The MCHE Accreditation Board shall approve the course	20 May 2000	Complied with. MAB absorbed the function delegated to the MCHE Accreditation Board on

Project Specific Covenants / Reference in Loan Agreement	Due Date	Status/Remarks
content of diplomas and certificates in postsecondary education. The MCHE Academic Board shall improve academic efficiency of postsecondary education. The MCHE Accreditation Board and the MCHE Academic Board shall include representatives from the Institutes.		14 August 2000.
7. Schedule 6, para 4(g): The Borrower shall cause the MCHE to be provided with adequate budgetary resources for the MCHE's operations during and after Project implementation.		Complied with.
Environmental		
8. Schedule 6, para. 9: The Borrower shall ensure that the location, design, construction and operation of the MCHE and the student dormitory to be established under the Project follow the Bank's "Environmental Guidelines for Selected Infrastructure Projects."		Complied with.
Social		
9. Schedule 6, para 5: Study Visits: The Borrower cause the MCHE, through the MCHE Academic Board, to select its staff for the study visits provided under the Project in accordance with arrangements satisfactory to the Bank.		Complied with.
10. Schedule 6, para. 6(a): Within nine months after the Effective Date, the Project Implementation Unit (PIU) shall submit to the Bank for its approval a fellowship program for the local and overseas fellowships provided under the Project and to be financed by the Bank. The program shall include detailed criteria and procedures of selection of trainees, and an implementation schedule. The PIU shall provide the Bank with a fellowship program provided under the Project and to be financed by AusAID upon finalization of the program with AusAID. The PIU shall monitor the administration of the local and overseas fellowships provided under the Project.		Complied with. All of the planned fellowships were completed. However AusAID finance did not materialize.
11. Schedule 6, para. 6(b): The PIU shall ensure that a strict system of selection and bonding is adopted in connection with the local and overseas fellowships provided under the Project to ensure that recipients of such fellowships continue their services for a reasonable period upon completion of their training.		Complied with.
12. Schedule 6, para. 7: The Borrower, AusAID and the Bank shall review the Project annually. The review shall include an examination of budgetary allocations for the Project, operation and maintenance costs, staffing and other incremental recurrent costs, implementation arrangements and achievements under the Project		Complied with.
13. Schedule 6, para 8(a): The Borrower shall provide adequate staff and recurrent budget (i) for extension programs at two regional hospitals of the Institute of Health Sciences; (ii) to support the mobile training vessel at the Maldives Institute of Technical Education (MITE); and (iii) to run the atoll center for the Tertiary Institute for Open Learning (TIOL), in order to ensure outreach programs at these institutes.		Partly complied with on 20 May 2002. Purchase of mobile training vessel at MITE was cancelled as it is not cost-effective. TIOL activities were modified following the absence of AusAID.
14. Schedule 6, para 8(b): Within three years after the Effective Date, the Borrower shall ensure that Maritime Training Center (MTC) (i) upgrade two junior staff as full-time staff to manage courses run by MTC; and (ii)	20 May 2001	Complied with.

Project Specific Covenants / Reference in Loan Agreement	Due Date	Status/Remarks
provides one full-time staff from the Ministry of Transport and Communications to supervise existing MTC staff.		
15. Schedule 6, para 12: During project implementation, MCHE, through the PIU, shall carry out benefit monitoring and evaluation (BME) activities under the Project. The PIU shall install and operationalize a management information system, within 18 months after the Effective Date, to assess the impact of the Project on the improvement of postsecondary education using key indicators, including gender and atoll residence, agreed upon between MCHE and the Bank as the baseline data.	20 November 2000	Partly complied with. BME was not carried out but some relevant data were compiled and made available.
16. Schedule 6, para. 13: Ministry of Finance and Treasury (MOFT) shall evaluate the benefits of the Project after the Project has been completed in accordance with a schedule and terms of reference to be agreed upon by MOFT and the Bank.		Not complied with.
Financial		
17. The Borrower shall establish immediately after the Effective Date, an Imprest Fund Account at the Maldives Monetary Authority. The initial amount to be deposited into the Imprest Fund Account shall be the equivalent of a six-month estimated expenditure or another sum agreed upon between the Borrower and the ADB.		Complied with.
18. Schedule 6, para. 11 (a): By 31 July 1999, the Borrower shall review the current and projected costs of the postsecondary education subsector including the MCHE and examine all feasible options for minimizing the public sector share of these costs.	31 July 1999	Complied with.
19. Schedule 6, para 11(b): By 31 July 2000, the Borrower shall implement a cost-sharing plan, based on the review mentioned in paragraph (a) above, to reduce stipends, charge fees, allow fee-paying students to register, permit private sponsorships, and consolidate administrative and academic costs of postsecondary institutes	31 July 2000	Complied with.
20. Schedule 6, para. 10: Within one year after the Effective Date, or at a later date as the Bank may otherwise agree, the Borrower shall have obtained the AusAID Grant or shall have made other arrangements satisfactory to the Bank.		Not complied with. AusAID grant did not materialize and the related activities were trimmed.
Others		
21. Established, Staffed, and Operating PMU/PIU		Partly complied with.
The Borrower shall ensure that the PIU established within MOE is transferred to the MCHE. The Borrower shall ensure that the PIU is adequately staffed by specialist and logistic personnel during the Project implementation period. The specialist staff shall include, at the minimum, an accounts officer, a procurement officer and a staff development/monitoring and evaluation officer.		PIU was not fully staffed as planned.
22. Fielding of Consultants		Complied with.
The Borrower shall cause competent and qualified consultants and contractors, acceptable to the Borrower and the ADB, to be employed to an extent and upon terms and conditions satisfactory to the Borrower and the ADB.		

Project Specific Covenants / Reference in Loan Agreement	Due Date	Status/Remarks
<p>23. The Borrower shall furnish, or cause to be furnished, to the Asian Development Bank (ADB), quarterly reports on the carrying out of the Project and on the operation and management of the Project Facilities. Such reports shall be submitted in such form and in such detail and within such a period as the ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.</p>		Complied with.
<p>24. Schedule 6, para. 14: A midterm review on all aspects of the Project shall be carried out by the Borrower, AusAID and the Bank during the third year of Project implementation, or at any time as may be agreed upon by the parties. Prior to the midterm review, MOFT shall provide the Bank with a midterm evaluation report on the progress of the Project and any problems encountered in Project implementation. The results of the midterm review, including an evaluation of the progress made under the Project, shall be discussed by the parties, and if required, appropriate corrective measures shall be formulated by the parties to ensure successful project implementation and achievement of the Project objectives.</p>		Complied with. An extension of 12 months to complete project activities was agreed at midterm review and approved by ADB. AusAID didn't participate as it withdrew from the Project.

ADB = Asian Development Bank, BME = benefit monitoring and evaluation, MCHE = Maldives College of Higher Education, MITE = Maldives Institute of Technical Education, MOFT = Ministry of Finance and Treasury, MTC = Maritime Training Center, PIU = project implementation unit, TIOL = Tertiary Institute for Open Learning.
Sources: Asian Development Bank.

ECONOMIC ANALYSIS

1. The Project's economic viability was reexamined based on the actual cost incurred, extended period of implementation, and updated benefit stream. The methodology adopted at appraisal for economic analysis was based on *ADB's Guidelines for the Economic Analysis of Projects, 1997* and is considered appropriate for this analysis at project completion.

2. The Project benefited and will continue to benefit the country at large providing a pool of skilled workers with appropriate knowledge such as nurses, teachers, community health workers, subprofessional managers, accountants, technicians, and mariners and seafarers, to make a useful contribution to economic development and long-term sustainable growth of the country. The Project was designed to make skills enhancement education more responsive to labor market needs. The Project was also to help graduates gain better quality and more relevant training in selected trades and programs. They should be able to find suitable initial employment without any significant waiting time and, more important, to secure continued career development.

3. The following assumptions were used to estimate the economic internal rate of return (EIRR):

- a) The economic analysis was carried out in constant 2009 prices and is expressed in dollar terms. The baseline data were taken from the appraisal documents and project files, whereas the benefit stream is based on data collected recently from relevant sources and available documents. The investment cost incurred before 2009 was rebased to 2009 by applying appropriate national escalation factors.
- b) Capital expenditures of the Project include civil works, staff development, equipment, furniture, and instructional materials. The recurrent cost after project implementation comes from government sources, not from the Project, and therefore is included in the cost stream. These amounts are already reflected in the government budgets.
- c) The period of analysis is assumed to be 15 years.
- d) An employment rate of 100% for the nurses, teachers, and mariners is assumed. For other professionals, an employment rate of 95% is assumed.
- e) Net benefits of the Project are assumed to start in the third year.
- f) A discount rate of 12% is assumed in the analysis.
- g) The largest source of benefits arises from the assumed increase in the salary of graduates. For the purpose of analysis, graduates are grouped into three categories as in the appraisal estimates, and their corresponding expected salaries per month are assumed. Salary data collected by Maldives College of Higher Education (MCHE) and interviews conducted by the project completion review mission suggest the following salaries for graduates:
 - a. secondary school teachers and nurses: \$1,000 (plus 25% expatriate allowance for expatriate workers),

- b. subprofessionals: \$1,200 (plus 25% expatriate allowance for expatriate workers), and
- c. mariners: \$8,000 for foreign companies and \$2,000 for national companies

Based on these assumptions the economic internal rate of return for the Project was estimated. The streams of economic costs (comprising capital and operation and maintenance costs) and economic benefits (comprising net salary increase) are shown in Table A8. The EIRR is 19%, slightly higher than the economic internal rate of return estimated at appraisal (17%).

4. **Sensitivity Analysis.** To account for possible risks in generating benefits, a sensitivity analysis was undertaken. Two variables, incremental salaries and rate of employment of the graduates, were tested. The expected incremental salary is found to have a major effect on the EIRR. Project benefits would have to be reduced by 19% to bring the economic internal rate of return down to 12%.

Table A8: Cash Flow Analysis
(\$ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007-2015
A. Inflow									
Incremental Benefits	0.0	0.0	0.0	0.5	0.8	1.4	1.9	2.5	3.1
Total	0.0	0.0	0.0	0.5	0.8	1.4	1.9	2.5	3.1
B. Outflow									
Investment Cost	0.1	0.1	0.3	1.4	2.8	1.7	2.3	1.4	1.9
Incremental Operating Cost	0.0	0.0	0.0	0.3	1.0	1.1	0.7	0.6	0.6
Total	0.1	0.1	0.3	1.7	3.8	2.8	3.0	2.0	2.5
Incremental net benefit	(0.1)	(0.1)	(0.3)	(1.3)	(3.0)	(1.4)	(1.0)	0.5	0.6

Base Case EIRR 19% **NPV @ 12%** 2 million
Net Benefit-Investment Ratio 3.32

SENSITIVITY ANALYSIS

<u>Switching values (at 12 %)</u>	<u>% change</u>		EIRR
Incremental Benefit	-19	Expected Incremental Salaries Reduced by 10% =	15%
Project investment costs	34		
Operating Cost	70	Employment Rate Reduced by 10% =	16%
		Investment Increased by 10%	

EIRR = Economic Internal Rate of Return
 Source: Asian Development Bank estimates

PROJECT COMPLETION REPORT RATING

Criterion	Weight (%)	Definition	Rating Description and Value	PCR Rating	PCR Weighted Rating
Relevance	0.2	The consistency of the Project's goal and outputs with the Government's development strategy, ADB's lending strategy for the country, and ADB's strategic objectives at the time of approval and evaluation	Highly relevant (3) Relevant (2) Partly relevant (1) Irrelevant (0)	3.0	0.6
Effectiveness	0.3	The achievement of purpose as specified in the policy goals and the physical, financial, and institutional objectives adopted at project approval, or as formally modified during implementation.	Highly effective (3) Effective (2) Less effective (1) Ineffective (0)	2.0	0.6
Efficiency	0.3	Comparison of the achievement of project purpose with the use of inputs based on implementation performance with consideration of the EIRR or cost effectiveness of the investment.	Highly efficient (3) Efficient (2) Less efficient (1) Inefficient (0)	2.0	0.4
Sustainability	0.2	Likelihood that human, institutional, and financial resources are sufficient to support achievement of results and benefits over the economic life of the Project.	Most likely (3) Likely (2) Less likely (1) Unlikely (0)	2.0	0.5
Overall Assessment (Weighted average of above criteria)	1.0	The overall weighted average of the four criteria. If one of the criteria has a score of 0, the rating is to be downgraded to partly successful.	Highly successful (OWA > 2.7) Successful (1.6 < OWA < 2.7) Partly successful (0.8 < OWA < 1.6) Unsuccessful (OWA is < 0.8)		2.1

ADB = Asian Development Bank, EIRR = economic internal rate of return, OWA = overall weighted average, PCR = project completion report.
Source: ADB. 2006. *Guidelines for Preparing Performance Evaluation Reports for Public Sector Operations*. Manila.