Completion Report

Project Number: 33071
Loan Number: 1762(SF)
September 2006

Bhutan: Health Care Reform Program

Asian Development Bank

CURRENCY EQUIVALENTS

Currency Unit – Ngultrum (Nu)

		At Appraisal	At Program Completion
		25 May 2000	12 June 2006
Nu1.00	=	$0.022	$0.022
$1.00	=	Nu44.20	Nu45.80

ABBREVIATIONS

ADB	–	Asian Development Bank
BHCRP	–	Bhutan Health Care Reform Program
BHTF	–	Bhutan Health Trust Fund
BHU	–	basic health unit
COS	–	Country Operational Strategy
Danida	–	Danish International Development Agency
EA	–	Executing Agency
FYP	–	five-year plan
HIV	–	human immunodeficiency virus
HIV/AIDS	–	human immunodeficiency virus/acquired immunodeficiency syndrome
HMIS	–	health management information system
IEC	–	information, education and communication
ISC	–	Inter-ministerial steering committee
JDWNRH	–	Jigme Dorji Wangchuck National Referral Hospital
MDG	–	Millennium Development Goal
MOH	–	Ministry of Health
MOHE	–	Ministry of Health and Education
MPHRH	–	Master Plan for Human Resources in Health
NCD	–	noncommunicable disease
NEC	–	National Environment Commission
PHC	–	primary health care
PBM	–	planning, budgeting and monitoring
PMU	–	program management unit
PPD	–	Policy and Planning Division
STD	–	sexually transmitted diseases
TA	–	technical assistance
VHW	–	village health worker

NOTE

(i) The fiscal year (FY) of the Government ends on 30 June.

(ii) In this report, "$" refers to US dollars.

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BASIC DATA

A. Loan Identification

1.	Country	Kingdom of Bhutan
2.	Loan Number	1762(SF)
3.	Program Title	Health Care Reform Program
4.	Borrower	Government of Bhutan
5.	Executing Agency	Ministry of Health and Education
6.	Amount of Loan	SDR7,614,000
7.	Program Completion Report Number	946

B. Loan Data

1.	Appraisal	
	– Date Started	25 May 2000
	– Date Completed	2 June 2000
2.	Loan Negotiations	
	– Date Started	9 August 2000
	– Date Completed	10 August 2000
3.	Date of Board Approval	21 September 2000
4.	Date of Loan Agreement	6 November 2000
5.	Date of Loan Effectiveness	
	– In Loan Agreement	6 February 2001
	– Actual	21 November 2000
	– Number of Extensions	-
6.	Closing Date	
	– In Loan Agreement	30 September 2002
	– Actual	27 September 2002
	– Number of Extensions	-
7.	Terms of Loan	
	– Interest Rate	1% per annum during the grace period, and 1.5% thereafter
	– Maturity (number of years)	24
	– Grace Period (number of years)	8

8. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
29 November 2000	27 September 2002	22
Effective Date	**Original Closing Date**	**Time Interval**
21 November 2000	30 September 2002	22

b. Amount ($ million)

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Canceled	Net Amount Available	Amount Disbursed	Undisbursed Balance
Health Care Reform	9.938	9.938	0.000	9.938	9.938	0.000
Total	9.938	9.938	0.000	9.938	9.938	0.000

C. Program Data

1. Program Cost ($ million)

Cost	Appraisal Estimate	Actual
Foreign Exchange Cost	10.000	9.938
Local Currency Cost	0.000	0.000
Total	**10.000**	**9.938**

2. Financing Plan ($million)

Cost	Appraisal Estimate	Actual
Implementation Costs		
Borrower Financed	0.000	0.000
ADB Financed	10.000	9.938
Other External Financing	0.000	0.000
Total	**10.000**	**9.938**
IDC Costs		
Borrower Financed	0.000	0.000
ADB Financed	0.000	0.000
Other External Financing	0.000	0.000
Total	**10.000**	**9.938**

ADB = Asian Development Bank, IDC = interest during construction.

3. Cost Breakdown by Program Component ($ million)

Component	Appraisal Estimate	Actual
Health Care Program	10.000	9.938
Total	10.000	9.938

4. Program Schedule

Item	Appraisal Estimate	Actual
First Tranche Release	6 February 2001	29 November 2000
Second Tranche Release	6 February 2002	27 September 2002

5. Program Performance Report Ratings

Implementation Period	Ratings	
	Development Objectives	**Implementation Progress**
From 21 Sep 2000 to 30 Nov 2000	Satisfactory	Satisfactory
From 1 Dec 2000 to 31 Dec 2001	Satisfactory	Highly Satisfactory
From 1 Jan 2001 to 28 Feb 2001	Satisfactory	Satisfactory
From 1 Mar 2001 to 30 Apr 2001	Satisfactory	Highly Satisfactory
From 1 May 2001 to 31 Dec 2001	Satisfactory	Satisfactory
From 1 Jan 2002 to 31 Dec 2002	Satisfactory	Satisfactory
From 1 Jan 2003 to 30 Jun 2005	Satisfactory	Satisfactory

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members[a]
Fact Finding	20 Mar–5 Apr 2000	5	56	a, b, c, d, e
Appraisal	25 May–2 Jun 2000	3	27	a, d, f
Review Mission 1 (Inception)	13–18 Dec 2000	2	12	b, g
Review Mission 2	17–28 Jun 2001	1	12	h
Review Mission 3	14–20 Nov 2001	1	7	h
Review Mission 4	1–5 Jul 2002	1	5	h
Review Mission 5 (Midterm)	3–11 Jun 2004	1	9	b
Program Completion Review[b]	12–16 Jun 2006	2	10	i, j

[a] Specializations of mission members are as follows: a – project specialist, b – health specialist, c – programs officer, d – counsel, e – social development specialist, f – management health specialist/consultant, g – social development specialist, h – sector specialist, i – senior urban development specialist, and j – project analyst.
[b] The program completion report was prepared by S. Bonu, Senior Urban Development Specialist (Governance).

BHUTAN
HEALTH CARE REFORM PROGRAM
(as completed)
National Capital
District Headquarters
National Referral Hospital
Regional Referral Hospital
Hospital
Basic Health Unit Grade-1
Basic Health Unit
Indigenous Hospital
Indigenous Unit
Malaria Center
District Boundary
International Boundary
Boundaries are not necessarily authoritative.
0 10 20 30 40
Kilometers
N
89°30'E
91°00'E
28°00'N
27°00'N
GASA
PUNAKHA
WANGDUE-PHODRANG
BUMTHANG
LHUENTSE
YANGTSE
THIMPHU
PARO
HA
TRONGSA
TRASHIGANG
MONGAR
DAGANA
TSIRANG
SAMTSE
CHHUKHA
SARPANG
ZHEMGANG
PEMAGATSHEL
SAMDRUP JONGKHAR
THIMPHU
Gasa
Punakha
Paro
Ha
Trongsa
Jakar
Lhuentse
Trashi-Yangtse
Chhangmi
Mongar
Zhemgang
Daga
Damphu
Sarpang
Chhukha
Samtse
Deothang
Laya
Lunana
Lingshi
Dungkhar
Kabisa
Samadhingkha
She'ngana
Dangchhu
Khoma
Dechhenchholing
Tshochasa
Bemji
Tang
Tangmachhu
Menji
Samtengang
Saphu
Patpachhu
Khamdang
Drugyel Dzong
Talo
Thinlegang
Teki Agona
Ura
Gortshom
Zangkhar
Tomzhangtshen
Thragom
Damthang
Bajo
Wangdulphodrang
Kuengarabten
Chhumey
Mukhung
Bali
Gidakom
Pubjikha
Tsamang
Tsakaling
Dramétse
Yang'nyer
Bartsham
Trashigang
Thongrong
Yabrang
Sakleng
Phongm
Rangjung
Merak
Dawakha
Genekha
Kamidhu
Gargela
Shingkhar
Lingmithang
Ngatshang
Chaskar
Uzarong
Sangbaykha
Bilekha
Chapohha
Nimshong
Buli
Thangrong
Nanong
Yonphula
Kangpara
Bara
Tendru
Tsimalakha
Lajab
Tsirang dangra
Patalay
Gonggdara
Dovan
Yebilabcha
Leylegang
Khomshar
Kengkhar
Belam
Khaling
Thrimshing
Pasaphu
Louri
Sipsu
Chargaray
Denchukha
Dungna
Bjurugang
Tsangkha
Khiorsaney
Drujegang
Maogaon
Silambi
Gongdu
Chhimung
Yurung
Riserbo
Shumar
Thungkhar
Minjiwoong
Dorokha
Chongekha
Gedu
Getana
Akhochin
Sunkosh
Lamidanga
Jigmeling
Suray
Gelephu
Norbuding
Gengphu
Drogar
Langdorbi
Yangbazi
Dung'me
Orong
Marshala
Dalim
Samrang
Daifam
Ghumauney
Changmari
Sengten
Gomtu
Buka
Phuentsholing
Tala
Bongo
Dagapela
Danesey
Pantang
Goshing
Kagbong
Thrimchung
Dechhenling
Gomdar
Raitar
Panbari
Balujora
Phibsoo
Edi
Panbang
Lalai
Manas
Norbugang
Yarewoong
Bhangtar
Kalikhola
Nichula
Taklai
Nganglam
Samdrup Jongkhar
06-2749 HR

I. PROGRAM DESCRIPTION

1. The Bhutan Health Care Reform Program (BHCRP; the Program) was approved by the Asian Development Bank (ADB) on 21 September 2000. The BHCRP was designed to assist the Government of Bhutan (the Government) implement policy reforms in the health sector with the support of a program loan equivalent to SDR7,614,000 (valued at $10 million at the time of approval). The Government's long-term vision for Bhutan—in which gross national happiness is the ultimate objective—is articulated in the document, *Bhutan 2020, A Vision for Peace, Prosperity and Happiness.*[1] Within this vision, the Government was committed to establishing a relevant and cost-effective health care delivery system based on the primary health care (PHC) approach, which effectively delivers health care services to all. The high population growth rate, competing global and domestic demands for funding, an economy in transition, and rising costs associated with the provision of social services, including health, were challenging the capacity of the Government to continue to provide free health and other medical services to its citizens. The Government had adopted a strategy of developing alternative sources of financing and improving efficiency of resource use, including through cost containment. The Government expected a wider scope for private financing of health care to promote sustainable financing and encourage rational use of health services.

2. The BHCRP encompasses major policy measures designed to collectively promote a more enabling environment for the Government to pursue its ongoing and future health programs. The program's scope included five priority policy areas: (i) develop sustainable financing for the health sector, (ii) strengthen health sector management capacity, (iii) strengthen quality assurance and public health regulatory functions, (iv) adjust imbalances in health-related human resources, and (v) strengthen PHC through selective interventions and expansion of priority services.[2] The Program supported the establishment of an alternative source of health financing through the Bhutan Health Trust Fund (BHTF), which was to ensure sustainable financing of the Government's vaccinations and essential drugs program.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

3. The BHCRP was in line with ADB's country operational strategy (COS) 2000[3] and the country assistance plan (CAS), 2001–2003.[4] The COS 2000 aimed to support poverty reduction in Bhutan by promoting economic growth and social inclusiveness. The main thrust of the poverty reduction efforts under the COS was to enable the Government's commitment to be realized under the strategic theme of improving the quality of life for all. ADB support was expected to (i) reduce physical infrastructure constraints, (ii) develop the domestic skills base, (iii) improve the urban environment, and (iv) support the sustainable provision of quality social services. In the health sector, the COS noted that despite extraordinary accomplishments in the past 15 years, the Bhutanese health care system faced some serious challenges. The 1994 National Health Survey found a population growth rate of about 3% per year and a total fertility rate of 5.6 children per couple. Health indicators such as infant and maternal mortality have decreased since the mid-1990s, but remain high by regional standards. The Government

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[1] Government of Bhutan. 1999. *Bhutan 2020: A Vision for Peace, Prosperity and Happiness.* Thimpu.
[2] See Appendix 1 for the program framework.
[3] ADB. 2000. *Country Operational Strategy for Bhutan*. Manila.
[4] ADB. 2000. *Country Assistance Plan (2001–2003) for Bhutan.* Manila.

highlighted population growth as one of its greatest challenges; the centerpiece of its policies to address this challenge was reproductive health care, including family planning.

4. An important element of the CAS 2001–2003 was promotion of financial sustainability and the self-reliance of the country's public service. There was a need to develop sustainable long-term financing of health services, and to improve the quality of care as well as the efficiency with which it was dispensed. The BHCRP was designed to help introduce crucial sector reforms to meet the current costs of improved services, reduce fluctuations in the annual allocations of essential drugs and vaccines, and encourage the introduction of new vaccines and drugs on a sustainable basis.[5] This was consistent with the sector development framework, did not overburden the capacity of the Department of Health, and complemented the activities of other funding agencies, particularly Health Sector Program Support II, which was supported by the Government of Denmark. The BHCRP supported establishment of the BHTF for sustainable health care financing as well as poverty reduction.

5. During the Eighth Five-Year Plan (8FYP), which was effective from 1997 to 2002, the Government accorded high priority to improving health care. Specifically, the Government aimed to (i) intensify population planning activities, (ii) consolidate and strengthen existing health infrastructure, (iii) promote self-reliance and sustainability in the health sector, (iv) strengthen human resource development for effective implementation of health services, (v) enhance the quality of health care services, and (vi) extend health care services to unserved areas. The midterm review of the health sector during the 8FYP recommended that the Government continue its efforts to develop additional sources of health financing, address the acute shortage of specialist doctors and technicians, and strengthen curative and diagnostic capacity for timely treatment, following the significant achievements made with respect to preventive care. As the physical expansion of health infrastructure was consolidated, the Government focused on the quality of health care.

6. The policy framework of the BHCRP was designed through a participatory process that involved field surveys, focus group discussions, and consultations with other stakeholders, including the major health sector aid agencies in Bhutan. As a result, the reforms and specific policy initiatives detailed in the policy matrix were consistent with the Government's own development objectives, and complemented the health programs of the international aid community in Bhutan.

B. Program Outputs

7. The program loan was disbursed in two tranches on fulfillment of 9 first-tranche and 11 second-tranche actions. Compliance with policy conditions is given in Appendix 2 and the

[5] ADB. 1999. *Technical Assistance to the Kingdom of Bhutan for the Health Care Financing and Reform Program.* Manila (TA 3186-BHU, approved on 16 April) was provided from April 1999 for conducting (i) a broad health sector review, which examined demographic and epidemiological trends, the status of public health programs, and the macroeconomic context; (ii) a detailed examination of issues and options in health care financing, health sector management and capacity building, quality care, and public health regulation; and (iii) an analysis of the feasibility and mechanisms for organizing and operating a health trust fund. The technical assistance (TA) examined needed policy reforms, consulted with beneficiaries and carried out a poverty impact assessment of suggested policy changes. The impact of the TA stemmed from the review of issues in the health sector. The TA was successful in assisting the Government to examine its strategic objectives and formulate a program of policy reform to improve the sustainability and quality of health care.

compliance with loan covenants is given in Appendix 3. The details of policy reforms in five subprogram areas are described below.

1. Develop Sustainable Financing for the Health Sector

8. **Pilot Study and Introduction of User Charges.** The BHCRP was to (i) conduct surveys on household health care expenditure and attitudes towards user payment, and (ii) hold consultations with stakeholders to determine which health services were to be deemed essential services. A study of user charges in secondary and tertiary dental care provides empirical evidence regarding the implications of introducing or increasing user charges in district as well as referral hospitals, for future policy guidance.[6] Other than for secondary and tertiary dental services, imposition of user charges is currently limited, leaving scope for expansion of user charges.

9. **Outsourcing Ancillary Hospital Services**. The BHCRP was to explore the possibility of introducing market mechanisms within the publicly financed system to secure additional efficiency gains. The feasibility of contracting health-related services to the private sector was assessed, and a market review of ancillary services for the hospital sector conducted, with a view to contracting these services to the private sector. The review identified cleaning, laundry, security, gardening and patient diet supply as ancillary services that could potentially be contracted out. However, the private company that was contracted for hospital cleaning services failed to keep the hospital clean. The Ministry of Health (MOH) is currently examining private sector capacity for expanded participation in the provision of ancillary hospital services.

10. **BHTF.** The BHTF was established in May 1998 with the primary objective of ensuring continued and timely supplies of vaccines and essential drugs, and eliminating financial uncertainties regarding their purchase. The Government envisages that returns on fund investments will cover annual expenditures on vaccines and essential drugs. Since the establishment of the full-time Secretariat for the BHTF in April 2000, the BHTF has made significant progress and mobilized $19 million (Appendix 4).

11. **Poverty Indicators as Criteria for Resource Allocations.** The Government was to adopt a policy advocating the use of poverty incidence as one of the criteria for resource allocation, in order to ensure equity in public financing of health services. The poverty indicators and other data to be generated by the Health Management Information System (HMIS) and the findings of the joint Government and ADB poverty assessment exercise were to then be used to allocate health resources during the Ninth Five-Year Plan (9FYP), which is effective from 2003 to 2007. Although the poverty indicators and other HMIS data were used in health resource allocation during the 9FYP, there are significant limitations in the availability of data for evidenced-based decision making, including resource allocation.

12. **Others.** To meet future challenges, a situation analysis of chronic degenerative

[6] The main findings of the study indicate that substantial increases in user charges for secondary and tertiary dental services did not impact the utilization of services in the Jigme Dorji Wangchuck National Referral Hospital, Thimpu. However, increases in user charges or introduction of user charges has had negative or stagnating effect on use of dental services in four pilot district hospitals—Mongar, Phuenssholing, Gelephu, and Trashingang. A major negative impact was observed in Mongar district hospital, where user charges for selected dental services were introduced for the first time during the study period; in the remaining three hospitals user charges were increased substantially during the study period. Introduction of user charges did not impact the gender or age composition of the dental service users. However, utilization by farmers—who can serve as a proxy for poorer sectors of the society—decreased during the study period.

diseases was to be conducted in 2001 to gain an understanding of the financial implications of chronic diseases on the health budget. A study of the projected need for and cost implications of out-of-country training and medical treatment was also to be carried out in 2001. The Government is using recurrent cost analysis on major capital investment as a standard health sector planning tool to facilitate priority setting and decision making on the basis of cost-effectiveness.

13. **Out-of-Country Training and Medical Treatment Costs.** A review of the cost implications of out-of-country training and medical treatments for the 9FYP period was conducted. From 1996 to 2004, the number of patients sent outside for treatment increased from 418 in 1996 to 703 in 2004. The total cost of out-of-country treatment increased from Nu21.8 million in 1996 to Nu70 million in 2004. A 20% annual increase in out-of-country costs is anticipated during the 9FYP period. The Masterplan for Development of Health Human Resources (2003) has projected out-of-country health training costs for the 9FYP period to be Nu558 million for 244 technical and administrative personnel catagories.

14. **Epidemiological Transition and Chronic Disease Burden.** The MOH has conducted a study on the burden of noncommunicable diseases (NCDs), including the cost implications of chronic disease burden. The salient findings of this study are (i) NCDs, including chronic degenerative diseases, contributed to about 14% of overall morbidity in 1998; and (ii) NCDs contribute to about 57% of overall mortality in the country. The mortality figures were based on hospital inpatient records, and hence might be biased towards NCDs. The cost of treating NCDs was estimated to be about 5% of the annual health budget over the last few years.

15. **Recurrent Cost Analysis.** The MOH, through the resource use database supported by the Danish International Development Agency (Danida), is attempting to keep updated information on all resources available and used at health facility level. This is expected to help in tracking recurrent costs and developing a standardized health facility maintenance program.

2. Strengthen Capacity in Health Sector Management

16. **Health Department Restructuring.** The Government was to introduce a comprehensive strategic planning framework for relevant health programs. A monitoring and evaluation section was expected to play an important role in ensuring that the data and other reports submitted by the district and village health offices are consistent. During the program period, the Ministry of Health and Education (MOHE) was split into two separate ministries: the MOH and Ministry of Education. MOH has also been restructured to improve monitoring and quality of services. The Policy and Planning Division (PPD) of MOH has now been reorganized to increase its focus on monitoring and evaluation, and is headed by a deputy secretary. The PPD is organized into four sections: planning and policy, monitoring and evaluation, HMIS and research, and international health.

17. **HMIS.** While MOH had measurable, time-based indicators, they were difficult to track because of deficiencies within the HMIS. The Program sought to address these problems and to increase the reliability, usefulness, and timeliness of information. The revised HMIS system is now in operation, with data from districts in specified, revised forms regularly obtained from the District Health Supervisory Officer. The HMIS data is used to monitor changes in the incidence/prevalence of diseases and thus to prioritize interventions at all levels, for both modern and traditional medicine. In addition, HMIS also collects information relating to health service utilization and information for management of health services. All 20 districts are computerized,

and recording and reporting systems follow the internationally utilized International Classification of Diseases-10 coding system.

18. **New Financial Management Procedures.** New financial procedures and manuals have been introduced by the Ministry of Finance (MOF), and have been adopted by MOH. MOH has introduced a planning, budgeting and monitoring tool to facilitate the preparation of work plans, budgets, and generation of standardized progress reports. This tool has also been programmed to link work plans and budgets, and to integrate monitoring of work plan progress with budget utilization.

3. Strengthen Quality Assurance and Public Health Regulatory Functions

19. Under the Program, the Government, on the basis of a review of its management approach, created a quality assurance focal point within MOH mandated with promoting a shift to more results-based management. One of its key tasks was to introduce a logistics system for the proper inventory of essential drugs, to monitor their availability, usage, and expiration date. A new division has been established under the Department of Medical Services, headed by a joint director. A policy document for quality assurance and standardization was prepared and disseminated to districts in 2002. A health technology and quality committee was formed as a national support structure. Quality assurance teams have been established at district level, as support structures for quality assurance and standardization. Standardization of nursing procedures is being attempted through enforcement of guidelines. A study on the technical competency of pharmacists in drug stores revealed gaps in their technical knowledge, especially in districts other than Thimpu. These findings have led to special initiatives by MOH to improve the quality of pharmacists in retail shops.

20. As part of the Program, a focal point was established within MOH to assume responsibility for coordinating public health regulations. This focal point ensures that (i) health sector input is obtained in the drafting of legislation and regulations related to health, and enforcement of legislation is strengthened; and (ii) disseminates all appropriate public health legal instruments. To achieve this task, a central repository has been established in PPD to compile, catalogue and update all existing and future legal documents.

21. **Bhutan Medical and Health Council and Private Sector Health Services Regulation.** The 80th session of the National Assembly enacted the Medical and Health Council Act in 2002. The Bhutan Medical and Health Council was constituted to carry out the functions prescribed under the Act, with the Council's secretariat established in March 2003. The functions of the Council are to (i) regulate all aspects of the medical and health professions, especially with respect to ethics; (ii) maintain a common register for all categories of medical and health professionals; (iii) ensure uniform standards of education and training for all categories of medical and health professionals; and (iv) recognize local and foreign medical and health institutions, scholars and academicians.

22. **Medicine Act.** The Medicine Act of the Kingdom of Bhutan, 2003 was enacted by the 81st session of the National Assembly. The Act deals with various aspects of the regulation of medicines such as drug testing, inspection, registration, licensing, storage, and disposal of expired medicines. The Act outlines the formation of a national drug regulatory authority and a drug-testing laboratory. A drug regulatory authority has been established to effectively enforce the Medicine Act.

23. **Occupational Health.** The situation analysis undertaken of occupational health and safety issues concluded these are not a major issue nationally. However, the report conceded that occupational health and safety issues are significant to the affected individuals. The Government recognizes the importance of occupational health and safety issues in view of industrialization and increases in the manufacturing and industrial sector workforce. A number of initiatives have been undertaken to address occupational health and safety issues. The National Occupational Safety and Health Information Network was established in the Department of Industries, and the focal point for occupational health and safety issues shifted from Department of Industries to the Ministry of Labor and Human Resources. The situation analysis highlighted the need for occupational health and safety measures for the non-formal agricultural sector, where 70% of the population is employed.

24. **Breast Milk Substitutes.** The breast milk substitute policy was been approved by the Council of Ministers in April 2002 and passed by the National Assembly in 2003. The policy has been issued by the Ministry to promote, protect and support breastfeeding. The Policy encourages exclusive breastfeeding during the first 4 months after childbirth, and continuation of breastfeeding until 2 years of age. The policy on breast milk substitutes: (i) supports regulations in line with South Asia Association for Regional Cooperation code for the protection of breastfeeding and young children's nutrition, (ii) grants maternity and paternity leave to facilitate exclusive breastfeeding, and (iii) adopts guidelines concerning breastfeeding and human immunodeficiency virus (HIV) issues.

25. **Tobacco and Alcohol Control.** All 20 *dzongkhags* (districts) have been declared tobacco free. The Government has banned the sale of tobacco and tobacco-related items in the duty free shops. The Government is also a signatory to the Framework Convention on Tobacco Control.

26. **Environmental Codes of Practices and Hospital Waste Management.** Environmental codes of practice for hazardous waste management, solid waste management and sewerage and sanitation have been developed by the National Environment Commission (NEC). In addition, the NEC has issued regulations regarding the environmental clearance of projects and strategic environmental assessment. Hospital wastes—e.g., clinical wastes, dressings, solvents, and expired chemicals and/or medicines—are one of the categories of hazardous wastes under the codes of practice for hazardous waste management.

4. Adjust Imbalances in Human Resources for Health

27. **Gender Equity in Staffing.** Female staffing in health units is particularly critical in addressing the country's high maternal mortality rate. To attain better gender balance in the health workforce, the revised master plan for development of health human resources states that where a basic health unit includes more than one technical staff member, at least one should be female. Effort is being made to increase female enrollment in paramedical courses and increase recruitment of female health workers.

28. **Review of Human Resources Master Plan.** The revision and updating of the Master Plan for Human Resources in Health to reflect current and projected personnel requirements in various disciplines, grade levels, and geographic areas was a major undertaking intended to adjust imbalances in health-related human resources. MOH published the revised master plan for human resource development in the health sector in 2003, which revised the first human resources master plan (published in 1998). The revised master plan was intended to assist human resource development in the health sector by projecting health service staffing requirements during the 9FYP and beyond.

29. **Village Health Workers.** The Government encourages community participation in the delivery of basic health services by optimizing the role of village health workers, who have made significant contributions. A booklet—*Information Kit on Village Health Workers in Bhutan*—was published giving information on recruitment and training of village health workers, and providing guidelines on selection by communities of village health workers.

5. Strengthen PHC through Selective Interventions and Expanding Priority Services

30. **STD/HIV Multisectoral Task Force.** The Government has reactivated the multisectoral task force on sexually transmitted disease (STD) and HIV issues. The prevalence of HIV/AIDS[7] is 0.01%, which is low. The task force has been meeting regularly at various levels to review and design responses to STD/HIV. The World Bank is supporting a HIV/AIDS prevention project, which would give greater impetus to ongoing efforts for HIV/AIDS control.

31. **Maintaining Recurrent Expenditures Levels.** The percentage of recurrent health expenditures in 1998–1999 was 56%. Except for 2001–2002, when the recurrent health expenditure fell to 48.3%, in the recent years the recurrent expenditure has been more than 60%. During the 9FYP recurrent health expenditures are expected to account for abut 64% of the total health budget. To ensure a continuing focus on PHC, the MOH has maintained the PHC budget at a level not less than 50% of total recurrent health expenditures.

32. **Comprehensive Emergency Obstetric Care and Telemedicine.** The number of facilities providing comprehensive emergency obstetric care has increased from four to nine, and the number of facilities providing basic emergency obstetric care has also increased. Care has been taken to ensure the facilities are geographically equitably distributed. The telemedicine project linking the Mongar regional referral hospital with Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), Thimpu was started in 2000.

33. **Others.** A study on Haemophilus influenzae b was conducted in the pediatric ward of JDWNRH. The study showed that 30% of the cases of meningitis were caused by H. influenza b. The study concluded that H. influenza b might be important causal factor of acute respiratory infection in Bhutan. Traditional health units have been established in all the dzongkhags and the district hospitals since 2002. In these facilities, the care seeker has the option to receive either allopathic or indigenous treatment. Additional resources have been committed to intensify information, education and communication (IEC) activities on substance abuse, including alcohol, tobacco, and betel nut. This included increased community involvement, collaboration with the media, and development of health promotion materials for wider dissemination to target groups.

C. Program Costs

34. Loan proceeds were used for implementing key policies and reform measures over a 5 year period (FY2001–FY2005), which spanned the first half of the 9FYP (FY2003–FY2007). This included the development of sustainable health sector financing mechanisms; a budgetary commitment to PHC; capacity building for health sector management, including the adoption of new management planning tools and techniques; capacity-building activities in quality assurance and public health regulations; and improved human resource development programs.

[7] Human immunodeficiency virus/acquired immunodeficiency syndrome.

The Government confirmed that the cost of the Program would not seriously impact its fiscal position. Prudent fiscal management has enabled the Government to keep the budget deficit at a minimum.

D. Disbursements

35. The Program was supported with a loan of SDR7,614,000 ($10 million equivalent at the time of appraisal) from ADB's Special Funds Resources. The loan was disbursed in two tranches. The first tranche of $4.90 million was released in November 2000, immediately after the loan was declared effective, while the second tranche of $5.04 million was released in September 2002, upon compliance with corresponding tranche conditions. The Government certified that the expenditures were made to finance eligible items specified in accordance with the provisions of the Loan Agreement.

E. Program Schedule

36. The Program was approved on 21 September 2000, signed on 6 November 2000, and became effective on 21 November 2000. The loan period was 2 years and the loan closing date, as per the Loan Agreement, was 30 September 2002; the loan closed and final disbursement took place on 27 September 2002. The Program was implemented over 5 years (FY2001–FY2005). The loan and the program period had no extensions.

F. Implementation Arrangements

37. ADB staff members closely monitored program implementation. The MOHE of the Government of Bhutan acted as the Executing Agency (EA) of the Program. In 2002, under the Government restructuring plan, the MOH became the EA when MOHE was restructured into the MOH and Ministry of Education. An inter-ministerial steering committee (ISC) was formed with representatives from other Government ministries and offices with a stake in the policy matrix. ISC members included MOF, the Planning Commission Secretariat, Ministry of Trade and Industry, NEC, and Royal Civil Service Commission. The ISC served as a coordinating and monitoring mechanism and provided policy oversight in program implementation. The BHTF board is chaired by the MOH minister; members include the MOH secretary, Department of Aid and Debt Management director general, Royal Monetary Authority managing director, Department of Medical Services director general, the head of the PPD, the Ministry of Trade and Industry, and the BHTF Project Director. BHTF has an advisory committee chaired by the director general of the Department of Medical Services. The ISC was supported by a program management unit (PMU) established within MOHE. The director of BHTF also acted as the program director of the PMU. The PMU was responsible for the day-to-day monitoring of progress in meeting the policy actions required for the release of the two tranches, and preparing program implementation progress reports for ISC. Overall, implementation arrangements were satisfactory in delivering program outputs and achieving the program.

G. Conditions and Covenants

38. All program-related covenants and tranche conditions were complied with. First-tranche conditions consisted of initial preparatory actions for health sector reform. The Government fully complied with the 11 second-tranche conditions, but this took slightly longer than anticipated during preparation of the BHCRP. Implementation of the 11 second-tranche conditions involved undertaking studies and drafting policies and acts for approval of the Committee of the Council of Ministers. MOHE was simultaneously drafting the 9FYP for the health sector. Assistance from

Danida provided significant inputs that allowed the Government to meet the second-tranche release requirements.

39. In addition to the program-related conditions, the Loan Agreement specified several covenants concerned with reporting requirements, implementation arrangements, record keeping, procurement, and monitoring and evaluation. These covenants were generally complied with, except for (i) submission of annual audited BHTF financial statements, and (ii) management of BHTF through the services of an international fund manager. These did not negatively impact the implementation and monitoring of the Program. Annual audits of BHTF have not been carried out. Instead, an audit for accounts from 1998 to 2005 has been conducted, and the audited report will be available by September 2006. The management of BHTF through the services of an international fund manager was not possible due to the volatility of capital markets during early 2000, and due to the sudden change of ownership of an investment firm, with which the Government was negotiating.[8] The status of compliance with loan covenants is in Appendix 3.

H. Consultant Recruitment and Procurement

40. No consultants were recruited under the Program, and likewise no procurement was supported by the Program.

I. Performance of Consultants, Contractors, and Suppliers

41. There was no provision for consultants, procurement or any goods or services in the Program.

J. Performance of the Borrower and the Executing Agency

42. The performance of the Borrower and the EA is satisfactory. The success of the Program was due in large part to its strong ownership by the Government. The Government led the reform program from the outset and provided stewardship during the entire implementation period. As a result of the Government's strong leadership, coordination with other funding agencies on health sector reforms was effective. Although BHCRP did not contain a technical assistance component, the Government ensured effective program implementation by fully utilizing support from other funding agencies (e.g. Danida). The reform program was complex and involved much preparatory work; the policy actions were generally implemented as per plan. This was possible because BHCRP constituted a deepening of the Government's ongoing reform program, and significant preparatory work was initiated as a part of ongoing efforts. BHTF was established as scheduled. The Government raised substantial funds for BHTF from other sources, although the targeted capitalization was not realized. One notable feature was that about $1.7 million was mobilized for BHTF through the "Move for Health Walk" by the then minister of Health and Education, along with six other volunteers, who walked 560 kilometers from Trashigang to Thimpu from 25 September to 15 October 2002. There was continuity of program leadership, with most key staff continuing throughout the program period.

[8] The Government finalized an agreement with the 1838 Investment Advisory Inc. of the United States, but withdrew the offer after the firm changed ownership.

K. Performance of the Asian Development Bank

43. Monitoring of BHCRP was done on a regular basis, although the project officers handling BHCRP changed four times during implementation. ADB fielded five missions during implementation to evaluate the progress of policy reforms and BHTF implementation. The missions undertook field visits, consulted beneficiaries, worked with BHTF, coordinated with other international development agencies, and discussed policy actions necessary for the achievement of the second tranche policy conditions. A midterm review mission was held in June 2004. ADB did not field any review missions during the last year of implementation. ADB demonstrated a positive approach in working with the Government. The performance of ADB is rated satisfactory.

III. EVALUATION OF PERFORMANCE

A. Relevance

44. BHCRP was relevant at the time of approval, and remains relevant at the time of program completion. The relevance of BHCRP was consistent with the country's development priorities and ADB's country and sector strategies, both at appraisal and at the time of the program completion review mission. The justification for the proposed intervention; problem diagnosis; selection of financing instrument; and (a) realism of proposed impact and outcome objectives, (b) required output levels, (c) risk management strategies, and (d) implementation schedule are found to be satisfactory. The design and the financing instruments selected, especially the support for BHTF, were an appropriate response to the identified development problem.

45. The health sector reforms and BHTF were consistent with the national health and population needs, problems demonstrated by the 1994 National Health Survey. The Government accorded high priority to improving health care during the 8FYP. The program supported the Government's health sector priorities, which included (i) intensification of population planning activities, (ii) consolidation and strengthening of existing health infrastructure, (iii) promoting self-reliance and sustainability in the health sector, (iv) strengthening human resource development for effective implementation of health services, (v) enhancing the quality of health care services, and (vi) extending health care services to unreached areas.

46. BHCRP's longer-term relevance is evident in the health sector objectives of the 9FYP. The program was relevant at the time of midterm and program completion as the program continues to support the Government's priorities during the 9FYP. The health sector plan during the 9FYP focused on (i) improvement of the quality of service with a focus on building the capacity to deliver services and instituting an effective delivery system; (ii) strengthening curative and diagnostic capacity, both for timely treatment and to remain current with appropriate technology; (iii) consolidation and improvement of infrastructure; (iv) introduction of user charges for selected health care services based on the principle of equity, accessibility, and sustainability; and (v) human resource development.

47. At the time of program design and approval, the program was in line with ADB's country strategies. The COS 2001–2003 supported financial sustainability and national self-reliance of public service. However, the health sector was not one of ADB's country priority sectors by the

time of the program completion mission. The Bhutan country strategy and program 2006–2010[9] contains two overall strategies: (i) assistance for programs and projects in core sectors, and (ii) capacity development in operational sectors and for overall development management. The four core sectors are transport, power, urban development, and financial and private sector development. However, given that ADB's overarching goal is to remove poverty from the region and support achievement of the Millenium Development Goals (MDGs), and that ADB's selectivity and focus on a few sectors in Bhutan is primarily for operational reasons, the program remains relevant to ADB's overarching goals.

B. Effectiveness in Achieving Outcome

48. The program is rated effective. The BHCRP goals broadly articulate the health-related MDGs: reduction of child and maternal mortality. The Government's recent assessment (based on process indicators) indicates the country is on track to achieve the health-related MDGs before 2015 (Appendix 5). BHCRP's three purposes have been effectively achieved. The first purpose related to the increased role of new financing sources in funding health expenditures. BHTF has been established, significantly capitalized (Appendix 4), and made operational to fund high-impact vaccines and essential medicines on a sustainable basis. User charges have also been introduced, albeit in a limited manner. The second purpose of the program was to improve cost-effectiveness in the delivery of health services. Measures introduced to improve cost-effectiveness include: (i) use of poverty indicators for budget allocations so as to improve poverty targeting; (ii) upgrading of the HMIS, with the information used more effectively to enhance cost-effectiveness; (iii) standardization of health facility maintenance; (iv) an emphasis on quality assurance; (v) control of NCDs through targeting of lifestyle habits, including control of tobacco use; (vi) improved human resources and better management of human resources; (vii) strict control on capital expenditures and maintenance of the proportion of the budget given to recurrent expenditures; (viii) expansion of comprehensive emergency obstetric care facilities to cost-effectively reduce maternal mortality; and (ix) a focus on surveillance and awareness building to control the HIV/AIDS epidemic in its early stages. The third purpose was to introduce result-based management, which has been achieved through strengthening of the MOH, especially the policy and planning division, and by strengthening the HMIS.

49. The objectives of the program have been effectively achieved. The first objective was to develop sustainable financing for health sector development. All the first and second tranche actions relating to this objective have been fulfilled on schedule. User charges have been introduced cautiously so as to limit the adverse impact on access to essential services by the poor. BHTF has been established and is functional. The situation analysis on chronic diseases was completed, and the findings have assisted in developing strategies to address the noncommunicable disease burden. The poverty indicators obtained from various studies are being used for policy and budget decision making, but these are largely available at national level; for improved results poverty indicators at district and subdistrict levels are essential.

50. The second objective of the program was to strengthen health sector management capacity. The HMIS system has been upgraded and a comprehensive strategic framework introduced. The policy and planning division has been strengthened, and the health unit maintenance program developed. The third objective of the program was to strengthen quality assurance and public health regulatory functions. The focal points for quality assurance and public health regulatory function have been established. A repository for public health laws and regulations has been established. All existing and new public health legislations have been

[9] ADB. 2005. *Bhutan Country Strategy and Program (2006–2010).* Manila.

compiled and disseminated. The medical and health council has been established. Sale of tobacco has been banned in all twenty districts, and regulations relating to marketing of breast milk substitutes have been introduced.

51. The fourth objective relates to adjustment of imbalances in human resources. The gender imbalances in health services, especially at basic health unit (BHU) level, have been reviewed, and steps taken to correct the imbalances in both pre-service training institutions and recruitment. The number of female health workers in BHU has been slowly increasing, and the master plan for human resources has been reviewed and updated. The fifth objective of the program was to strengthen the PHC, the recurrent budgets for which are above 50% of total recurrent budget expenditures. The total number of hospitals providing comprehensive reproductive health services has increased to nine, and is likely to increase further in the next few years. The multisector task force on STD/HIV/AIDS has been reactivated. The study on H. influenzae b has been undertaken, and pilot telemedicine project implemented. The number of indigenous units in district hospitals has been increased from 14 to 22 (one unit each has been established in Phobjkha and Riserbu). The IEC campaign has led to ban of tobacco sale in all 20 districts.

C. Efficiency in Achieving Outcome and Outputs

52. The program has been efficient in terms of implementing BHCRP and BHTF investment. The program was implemented through a PMU with support from BHTF. Despite the lack of any technical assistance, the program achieved its outputs and purpose, which is indication of the efficiency with which the program was managed by the Government. The lack of technical assistance supported by the program was compensated for by integration of the reform program with other funding agency support, especially from Danida. Thus, by coordinating various funding agency inputs into the reform program, the program was implemented efficiently.

53. The counterpart funds were deposited in BHTF. BHTF was operationalized in 2003–2004, when global capital markets, especially in United States, were highly volatile. The Government's other trust funds—for pension and the environment—did not perform well during that period, and BHTF was consequently very conservative in its investment strategy. Instead of engaging a professional investment firm to manage the investments, BHTF took a conservative approach and invested mostly with the Government, providing assured return of around 5% to 7%. Given the volatile nature of global capital markets BHTF's conservative approach was effective and reasonable.

D. Preliminary Assessment of Sustainability

54. The sustainability of the program is rated likely. Strong macroeconomic performance has underpinned the Government's poverty reduction efforts. Economic growth has accelerated from 5.5% in the first half of the 1990s to an average of over 7% between 1999 and 2004. Macroeconomic performance is likely to maintain the momentum seen in early 2000, which should provide a strong macroeconomic basis for program sustainability. The program design also contributes significantly to sustainability. Strong Government ownership of the reform agenda, coordination and support from other funding agencies, and sustainability of reforms as a key part of the program design will also assist in sustaining the reforms.

55. BHTF is an example of a design-level emphasis on sustainability. The counterpart funds from the Program were deposited in a trust fund, with the returns used to finance vaccines and essential drugs in a sustainable manner. Likewise, the emphasis on user charges, human

resource development, and maintaining the share of recurrent budget allocations strengthened the likelihood of sustainability of reforms. The emphasis on awareness building, control of tobacco consumption, and other cost-effectiveness initiatives has also improved program sustainability.

E. Contribution of the Program Loan to Institutional Development

56. The Program has a strong institutional development component. By supporting BHTF, the Program supported creation of a trust fund for sustainable financing of health services. The trust fund provides institutional arrangements to seek higher return on investments to fund social services, and thus aligns Government functions closely with markets. This will introduce developing skills to manage funds, balance returns with risks and explore opportunities for higher investment returns globally. With its sector-wide coverage and inputs from other aid agencies, BHCRP had initiated a process for advancing a more structured and coordinated approach among aid agencies for addressing health sector issues, which were expected to become more complex over time in view of changing social, cultural, and economic circumstances.

57. The Program also supported (i) strengthening of (a) policy and planning, and (b) the HMIS; (ii) establishment of (a) a repository of health regulations and laws, (b) medical and health councils, (c) legislation relating to occupational health, and (d) regulations regarding marketing of breast milk substitutes, and (iii) introduction of environmental codes. These had a significant impact on institutional development through enhancement of laws, regulations and procedures, and norms and practices. The Program also supported implementation of new government financial management procedures in MOH. The institutional development impact of BHCRP is rated significant.

F. Impacts

58. The overall impact of the Program is rated substantial, in particular on the poor, mothers and children. Bhutan is on track to achieve all the health and poverty reduction-related MDGs. The Government is committed to economic development with an emphasis on equity, which has led to significant investments in health. The program supported reforms to strengthen health-care delivery and ensure sustainable sources of financing for PHC in the long term. Health sector financing reform resulted in development of additional financing methods. User charges have been introduced cautiously, so the poor are not adversely affected. Improved quality and management capacity has lead to better health services for all, including the poor. Revising and updating the human resources master plan has ensured equal opportunities for men and women in the health-care career path, and will strengthen human resource development. The increased number of women working at the BHU level and below has broken down barriers to women's access to health care, thereby improving health status. Equity in health service delivery has been achieved by maintaining the budgetary commitment to health services, and in particular PHC. The financing, regulatory and management reforms have ensured that the poor are protected by ensuring essential services are still free; where charges are introduced, appropriate exemption mechanisms are in place to protect the poor. The Program supported development of environmental codes of practices and improved systems for the proper disposal of medical waste in hospitals and other health facilities, which will have a positive impact on the environment.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

59. The BHCRP is rated successful. It was implemented as planned. The policy measures set out under the Program were carried out as per schedule, with timely release of the two program tranches. As per current assessment, based on available data, Bhutan is on track to achieve the health-related MDGs. The process indicators for child and maternal health are showing significant improvement. Establishing BHTF and introduction of user charges have led to some degree of sustainable financing for the health sector. The strengthening of HMIS, creation of a policy and planning division, and review of human resources, among others, has helped to strengthen health sector management. Establishment of the Bhutan Medical and Health Council and approval of various regulations and codes has helped to improve the regulatory mechanism.

B. Lessons Learned

60. The following lessons emerge from analysis of project design and program implementation:

(i) Success of BHCRP is due in part to strong ownership of program reforms by the Government; stability of the tenure of key Government stakeholders associated with program implementation; support for the reform program from major funding agencies; support for deepening of ongoing reforms (rather than entirely new reforms); and implementation of practical and achievable reforms.

(ii) Successful contracting of services to the private sector requires: (a) development of the capacity of the government agency for contracting services to the private sector; (b) establishment of good selection criteria for contracting private companies; and (c) assessment of the capacity of the private sector to provide efficient and quality services.

(iii) A major challenge and barrier to the provision of emergency obstetric care in the South Asia region has been a severe shortage of anesthetists. Bhutan has addressed this issue to some extent by training and using nurse anesthetists. This is a significant option that other countries in this region may have to explore to address severe shortage of anesthetists.

(iv) Sustainable financing of essential health services can be implemented through establishment of a trust fund.

(v) Unlike most external social sector support programs, where committed liabilities are created through expansion of services due to significant inputs into capital expenditures, BHCRP was designed to support consolidation and sustainability of health financing.

C. Recommendations

1. Program Related

61. **User Charges.** It is important to have clear guidelines and mechanisms relating to exemption of user charges for the poor. The potential for increasing the scope of health services

through introduction of user charges appears best in JDWNRH, Thimpu, especially with the increasing trend towards specialization. The Government should continue to explore ways to extend user charges without compromising access to essential health services by the poor.

62. **Preparing for Epidemiological Transition**. The NCD morbidity figures are outdated, and likely to be higher due to modernization and lifestyle changes. There is need for regular updating of information on NCDs, with the help of HMIS and special sample surveys, to assist in developing proactive prevention-related policies and programs. Data on the financial implications of NCDs are not clear. As the epidemiological transition ensues—from a predominantly communicable disease burden to a more costly NCD burden—MOH may need better data on the financial implications of NCDs, so as to design effective and sustained funding strategies, including insurance. It may be necessary to institute further studies for better understanding of the financial implications of NCDs.

63. **Adjust Imbalances in Human Resources.** A regular review of the human resources health master plan may be undertaken to consider the current and projected institutional capacity of paramedical schools and standardization of healthcare worker recruitment procedures.

64. **Private Sector Participation.** Further efforts to contract ancillary hospital services to the private sector would entail regular review of private sector capacity to provide good quality services efficiently, as well as enhancement of MOH capacity for contracting of services to the private sector (e.g., tender document preparation, tendering, contracting, monitoring).

65. **HMIS.** Data from HMIS forms is manually entered into computers at the district and country level. This can be improved by introducing scannable forms and special software, which scan data directly into the database. A further review of the HMIS may be conducted to increase its relevance and effectiveness for generating poverty indicators as criteria for resource allocation.

66. **Institutional Delivery Care.** Though significant progress has been made on the supply-side, the percentage of women who undergo delivery in institutions is still very low. There is need to study the reasons for low institutional delivery, and appropriate demand- and supply-side initiatives should be taken. A major barrier for women seeking institutional delivery care may be the cost of transportation to reach the facility from distant places. Demand-side interventions, such as vouchers for transportation and making available funds at the facility level to engage emergency taxi services to transport women in labor, may be explored. Delays in care-seeking by women in labor due to community and household resistance can be reduced through IEC activities, especially involving district civil servants and elected representatives.

67. **Hospital Waste Management**. Significant progress has been made in the segregation of hospital solid waste. However, further progress needs to be made to dispose of different types of biological and nonbiological hospital solid waste. Special attention is required for safe disposal of hospital liquid waste. Proper liquid waste management is necessary to improve safety for both staff members and patients, and to reduce the cost associated with its disposal.

68. **Future Monitoring.** Since BHTF has not fully achieved its capitalization and expenditure targets, the Government is request to monitor the progress of BHTF, and provide to ADB regular progress and audit reports of BHTF for the next 3 years.

69. **Covenants.** One of the two pending covenants—management of BHTF through the services of an international fund manager—can be dropped. The decision regarding the management of BHTF through the services of an international fund manager may be left to the Government, based on the Government's overall assessment of various investment opportunities, and in line with Government's approach to other funds (e.g. environment and pension funds).[10] This leaves one partialy-fulfilled covenant relating to the submission of annual reports for BHTF, including audited financial statements. The annual reports have been submitted regularly, but the annual audit reports have not been carried out. Instead, an audit for accounts from 1998 to 2005 has been carried out, which will be available by September 2006. So far very limited expenditure has been incurred from BHTF, which is likely to increase in future. In view of the current audit of BHTF accounts from 1998 to 2005, the covenant may be considered as having been partly complied with. BHTF will submit the audit report to ADB as soon as it is available.

70. **Further Action or Follow-Up**. The BHTF audit report (up to June 2005) is yet to be submitted. The Government should submit the audited report as soon as it is ready for circulation.

71. **Additional Assistance.** Additional assistance to deepen the health sector reforms and further capitalize BHTF is desirable. However, in view of ADB's Bhutan Country Strategy and Program, which focuses on four core sectors that does not include health, other sources of assistance to the health sector should be explored.

72. **Program Implementation.** The Program had four different ADB project officers during implementation, in addition to the mission leader who led the design. The EA felt that continuity of the mission leader who designed the program during program implementation would be more effective. Some of the program reforms, though undertaken within the legal definitions of the Program, can be deepened further.

[10] The concept of the trust fund being managed by an international firm needs to be revisited. The nature of the trust fund demands assured and stable returns on investments on an annual basis to fund vaccines and essential drug purchase, which might not always be possible through investments in stock markets on a short-term time horizon. For example, the downturn in stock markets after the technology bubble "burst" in 2000 led to severe bear market for 3 years, eroding capital with negative returns.

PROGRAM FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
Goal To improve the health of the population of Bhutan	1.1 Increase in life expectancy at birth from 66 in 1994 1.2 Decline in the current maternal mortality rate of 380 per 100,000 live births 1.3 Infant mortality rate decline from 71 per 1,000 live births 1.4 Under 5 mortality rate decline from 96.9 1.5 Increase in the contraceptive prevalence rate of 37 1.6 Reduced incidence of acute respiratory infection and diarrhea as the leading causes of infant mortality	1.1 Health management information system (HMIS) 1.2 Intermittent population-based surveys	**Assumptions** • Political will to improve the standard of living of the population of Bhutan remains at current high level **Risk** • No major disease outbreak: e.g., AIDS (acquired immunodeficiency syndrome)
Purpose To improve the policy, management and regulatory framework of the health sector to increase efficiency and financial sustainability	1.1 Increased role of new financing sources in funding health expenditures 1.2 Improved cost-effectiveness in delivery of heath services 1.3 Results-based management introduced	1.1 Government accounts 1.2 Periodic cost-effectiveness reviews of health service programs; annual health conferences 1.3 Planning documents	**Assumptions** • Timely completion of pilot studies and adoption of appropriate policy recommendations and legislation • National Assembly approves draft legislation • Sufficient human resources available
Outputs 1. Sustainable financing for health sector developed	1.1 Services subject to user charges identified by September 2001 1.2 Bhutan Health Trust Fund (BHTF) legally established by September 2000	1.1 Pilot study report; minutes of Ministry of Health and Education (MOHE) meetings 1.2 BHTF royal charter	**Assumptions** • Pilot study identifies user charges that are feasible to introduce • Royal charter signed • Sufficient funds obtained to capitalize the BHTF; satisfactory performance

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
			of fund manager
	1.3 Situation analysis on chronic diseases completed by September 2001	1.3 Situational analysis report	• Technical assistance (TA) available
	1.4 Policy paper to use poverty incidence in budget allocation completed by September 2001	1.4 MOHE reports and budgetary accounts	• Reliable data generated by HMIS and poverty assessment study
2. Health sector management capacity strengthened	2.1 HMIS upgraded by September 2001	2.1 HMIS reports; annual health bulletins	• Reliability of primary database
	2.2 Comprehensive strategic framework introduced by September 2000	2.2 MOHE reports; MOHE minutes	• TA in HMIS obtained
	2.3 Policy and Planning Division staff complement increased by 2002	2.3 MOHE monitoring and evaluation reports	• Sufficient qualified human resources available
	2.4 Bhutan health unit (BHU) maintenance program developed by September 2000	2.4 Maintenance guidelines	• Effective supervision and compliance
3. Quality assurance and public health regulatory functions strengthened	3.1 Focal points for quality assurance and public health regulation established in the Office of the Secretary of MOHE by September 2000	3.1 MOHE reports; MOHE organizational structure	• Qualified human resources available
	3.2 Existing and new public health legislation compiled, disseminated, and enforced	3.2 Published new public health regulations and legislation; catalogue of regulations; judicial reports	• Sufficient capacity to enforce regulations
	3.3 Medical and health council established by 2002	3.3 Draft legislation establishing the Bhutan medical and health council approved by the Council of Ministers	• Approval of draft legislation by the National Assembly
	3.4 Draft legislation on occupational health and safety by April 2001	3.4 Final draft law submitted to the Council of Ministers	• In-country capacity to conduct industrial surveys as basis for draft legislation
	3.5 Environmental codes of practice	3.5 Regular surveys of health facilities	• Environmental and proper waste disposal guidelines

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
	for urban development including improved system for proper disposal of medical waste developed by September 2001		strictly followed and enforced
	3.6 Regulations for alcohol and tobacco control by September 2001	3.6 Trade and industry statistics; medical statistics on substance-induced sicknesses	• Regulations are strictly enforced; monitoring capacity available
	3.7 Regulation of marketing of breast-milk substitutes in force by September 2001	3.7 Draft regulation on the marketing of breast-milk substitutes approved by Council of Ministers and submitted to National Assembly by September 2001	• Approval of the regulations by the National Assembly
4. Imbalances in human resources for health adjusted	4.1 Gender equity in the staffing of health services reviewed by September 2000	4.1 Report of gender equity review	• Commitment of the Government to human resource restructuring and gender equity is maintained
	4.2 Master Plan for Human Resources in Health (MPHRH) reviewed and updated by September 2001	4.2 Master plan	• Human resources available
	4.3 Numbers of female health workers in BHUs increased from 2000 level	4.3 Reports of human resources of health	• Willingness of female staff to be assigned in remote areas
5. Primary Health Care (PHC) strengthened	5.1 Recurrent budget devoted to PHC is at least 50% of total recurrent expenditures	5.1 Budgetary data	• Commitment of the Government to PHC remains at its current high level
	5.2 The number of hospitals providing comprehensive reproductive health services increased from four to eight by September 2001	5.2 Annual health bulletins; number of maternal deaths	• Sufficient staff trained on time
	5.3 Multisectoral Task Force on sexually-transmitted diseases/human	5.3 MOHE reports	• Sufficient commitment of ministries; TA of international funders

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
	immunodeficiency virus reactivated and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) surveillance system strengthened by September 2000		
	5.4 Study of *Haemophilus influenzae b* undertaken in 2001	5.4 Report of Study	• TA available
	5.5 Pilot telemedicine project implemented by September 2001	5.5 MOHE reports	• TA available
	5.6 Number of indigenous units in district hospitals increased from 14 to 20 by 2002	5.6 Annual health bulletins; hospital surveys	• Adequate number of traditional health staff and sufficient quantity of traditional medicines available
	5.7 Information, education, and communication (IEC) activities on substance abuse, including alcohol, tobacco, and betel intensified by September 2000	5.7 Variety of up-to-date IEC materials	• Adequate resources to launch large-scale IEC activities nationwide

Milestones	Inputs
6.1 Strengthening of HMIS, Updated MPHRH	Health Sector Support Programme Phase II Danish International Development Agency (Danida) Asian Development Bank (ADB), Danida, Government
6.2 Pilot study on expansion of user charges	
6.3 BHTF established	ADB, Government and other sources of aid Support from multiple sources of external assistance
6.4 PHC interventions	

UPDATED POLICY MATRIX

Policy Priorities	Conditions Fulfilled by Loan Effectiveness (21 November 2000) for First Tranche Release	Conditions Fulfilled by 27 September 2002 for Second Tranche Release	Other Actions Fulfilled by Midterm Review (1–11 June 2004)	Current Status of Project Completion Review Mission (June 2006)
A. Develop Sustainable Financing for the Health Sector	***1.1.1*** *Submit pilot study to assess the feasibility of expansion of user charges to the Council of Ministers for its consideration. The proposal will include the objectives and scope of the pilot study based on the findings of survey studies and consultations with stakeholders, and will ensure that there will be no impact on access to essential services as defined in the pilot study.* ➢ Pilot study to introduce user charges for non-essential services (diagnostics, dental) approved by Council of Ministers. Pilot test in one hospital and 2 BHUs to start in January 2000.			Implemented
	1.1.2. *Legally establish the Bhutan Health Trust Fund with its board of directors appointed.* ➢ Royal Charter approved and Board of Directors appointed			The Bhutan Health Trust Fund is now fully operational though the full capitalization targets have not yet been met.
		1.2.1. *Based on the findings of the pilot study, draft a proposed structure of user charges for additional health services for public discussions prior to their introduction in the Ninth Five-*		User charges are being gradually introduced. Currently user charges being implemented in

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		Year Plan. ➢ Policy option analysis on user charges was completed on 8 November 2001. The proposed schedule of user charges for additional health services was included in the draft policy and has been discussed by the public. In view of the findings of the studies relating to charges and utilization, and feedback from public discussion, no new user charges have been introduced to date.		secondary and tertiary dental care.
		1.2.2. *Complete policy paper advocating the use of poverty indicators as one of the criteria for resource allocation to ensure more equitable access to health services.* ➢ The policy paper was completed on 8 November 2001. The paper undertook a wide-ranging examination of various criteria that may be used for resource allocation. In addition to using poverty indicators as a criteria for resource allocation, the paper discusses the usefulness of using indictors other than those collected by the poverty assessment study, including		Use of poverty indicators for resource allocation attempted but the data was found to be less useful for resource allocations within a district. HMIS data is also being used for planning purposes

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		findings from other relevant surveys such as the household income and expenditure survey and the national health survey.		
			1.A. *The Council of Ministers approves the proposed pilot study for expansion of user charges no later than November 2000; study is undertaken immediately thereafter.* ➢ Done. A study on user charges in secondary and tertiary dental care has given empirical evidence about implications of introduction of or increase in user charges in district- as well as referral hospitals, for future policy guidance.	Implemented
			1.B. *Use of poverty indicators based on the findings of the Government-ADB poverty assessment study, and health management information system (HMIS) data in the health resource allocation during the Ninth Five-Year Plan.* ➢ Though poverty indicators based on the findings of the Government-ADB poverty	Implemented

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			assessment study and HMIS data were used in health resource allocation during the 9FYP was done, there are significant limitations in the data availability for evidence-based decision making, including resource allocation.	
			1.C. *Complete a market review of ancillary services for the hospital sector n 2001, with a view to contracting out of these services.* ➢ A market review of ancillary services for the hospital sector was conducted with a view to contracting out these services. The review identified cleaning, laundry, security, gardening and patient diet supply as potential services that could be outsourced.	Implemented
			1.D. *Conduct a study in 2001 on projected need for and cost implications of out-of-country training and medical treatment.* ➢ A review of cost implications of out-of-country training and medical treatments for the 9FYP period was	Study conducted

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			conducted. Between 1996–2000, the number of patients sent outside for treatment increased from 418 in 1996 to 593 in 2000. The total cost of out-of-country treatment increased from Nu21.8 million in 1996 to Nu49 million in 2000. The annual increase in out-of-country treatment costs varied from 11% to 38%. During the 9FYP period, it is anticipated that the annual increase in the out-of-country costs would increase by 20%.	
			***1.E**. Complete a situation analysis in 2001 on chronic degenerative diseases with projections of the burden of disease and financial implications for the health budget made to the extent possible.* ➢ The MOH has conducted a study on the burden of NCDs, including the cost implications of the chronic disease burden. The salient findings of this study are (i) NCDs including chronic degenerative diseases contribute to about 14% of overall morbidity in 1998;	Situation analysis completed.

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			and (ii) NCDs contribute to about 57% of overall mortality in the country.	
			1.F. *Use recurrent cost analysis for major capital investment as a standard tool for the health sector in 2001.* MOH, through the Danida supported resource use database, is attempting to keep updated information on all resources available/used at health facility level, which in turn is expected to help in keeping track of recurrent costs and developing a standardized health facility maintenance program.	Implemented
B. Strengthen Capacity in Health Sector Management	***2.1.1.*** *Adopt a comprehensive strategic framework for implementing and monitoring of health programs.* ➢ Overall plan exists. Workplans have been prepared in selective areas like rural water supply and sanitation, and program meetings are held monthly with Director, quarterly with the Secretary of Health, and yearly with the Minister.			Adopted
	2.1.2. *Prepare a restructuring plan to strengthen the Policy and*			Implemented

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	Planning Division (PPD) of the Ministry of Health and Education (MOHE), including a new monitoring and evaluation section. ➢ Two persons have been posted and will be provided training in the Policy and Planning Divison.			
	2.1.3. *Prepare a standard health facility maintenance program.* Draft prepared and field test expected to done in 2 months with Danida support.			Implemented
		2.2.1. *Install revised HMIS in MOHE based on a simplified mechanism of data collection.* ➢ The HMIS has been revised and was installed on 1 April 2002. It is now rid of duplication and inconsistencies, collects pertinent data, and is more user friendly. The HMIS manual has also been developed. Training for relevant staff has been undertaken.		Implemented
		2.2.2. *Complete identification of adequate staffing for recruitment*		Implemented.

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		for the restructured PPD, based on the proposed restructuring of MOHE. ➢ Identification of staffing for recruitment in a restructured PPD has been completed, and is reflected in the approved MPHRH. Strengthening of PPD is ongoing; staff have been trained and have returned to Bhutan, and more are scheduled to train during the 9FYP. Although the proposed bifurcation of MOHE is still being considered by the Government, along with its fiscal implications, MOHE has expanded the purview of PPD to include the HMIS and research sections (these two sections are with PPD in the post bifurcation organogram). New additional staff have been recruited for PPD.		
			2.A. *The health sector adopts new government financial management procedures in 2001.* ➢ New financial procedures and manual has been	Implemented

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			introduced by Ministry of Finance (MOF), and has been adopted by the MOH. With the support of Danida, the MOH has introduced PBM tool. The PBM is to facilitate the preparation of work plans, budgets, and generation of standardized progress reports. The PBM has also been programmed to link the work plans with budget, and integrate monitoring of work plan progress with budget utilization. The PBM is programmed to link with the Budget and Accounts System of MOF, so that duplication of accounts-related data entry is avoided.	
C. Strengthen Quality Assurance and Public Health Regulatory Functions	***3.1.1.*** *Establish focal points for quality assurance and public health regulation in MOHE.* ➢ Focal point established in Public Health Division on a part-time basis.			Established
	3.1.2. *Establish a central repository within MOHE for laws and regulations pertaining to public health.*			Established

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	➢ Documentation center has been set up and a librarian has been trained with Danida.			
		3.2.1. *The Council of Ministers approves a draft law for the establishment of the Bhutan Medical/Health Council; it is submitted to the National Assembly for consideration.* ➢ The draft law as approved by the Council of Cabinet Ministers on 1 April 2002, was submitted to the National Assembly on 10 April 2002 for its consideration. The act regulates the medical and health professions, including the maintenance of education standards and recognition of certificates, diplomas, and degrees, and recognition of medical and health institutions.		Approved
		3.2.2. *Complete situation analysis report on occupational health and safety issues and use as a basis for future legislation in the Ninth Five-Year Plan.* ➢ The situation analysis was finalized and approved by		Completed

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		the relevant departments on 8 November 2001. The related future legislation is included in the draft labor law being drafted by the Department of Employment with the support of ADB technical assistance.		
		3.2.3. *The Council of Ministers approves draft regulations on the marketing of breast-milk substitutes; they are submitted to the National Assembly for consideration.* ➢ The breastfeeding policy was approved by the Council of Ministers on 1 April 2002. The Government is implementing the provision of the policy. The approved policy encompasses regulation of food products and feeding equipment suitable for children below 2 years of age, social mobilization, and training of health workers. The regulation of food products for children under the age of 2 is in accordance with the International Code of Marketing Substitutes and the SAARC Model Code on Protection of Breastfeeding		Approved

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		and Young Child Nutrition. The SAARC Code was submitted to the National Assembly for its consideration on 20 August 2002.		
			3.A. *Draft regulations covering private sector health services (diagnostic facilities, dental and eye services) in 2001.* ➢ The 80th session of the National Assembly enacted the Medical and Health Council Act in 2002. The Bhutan Medical and Health Council has been constituted to carry out the functions prescribed under the Act. The Council's secretariat was set-up in March 2003. The various functions of the Council include (i) regulate the medical and health profession in all its aspects, especially with respect to ethics; (ii) maintain a common register for all categories of medical and health professionals;(iii) ensure uniform standard of education and training for all categories of medical and health professionals; and	Draft being prepared

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			(iv) recognize local and foreign medical and health institutions, scholars and academicians. The draft regulations covering private sector health services (diagnostic facilities, dental and eye services) are under preparation.	
			3.B. *Introduce a public health regulation in 2001 to control marketing and consumption of tobacco, alcohol and betel.* ➢ All the 20 dzongkhags (districts) have been declared tobacco free. The Government of Bhutan has banned the sale of tobacco and tobacco related items in duty free shops. The Government is also a signatory to the Framework Convention on Tobacco Control.	All 20 districts have been declared tobacco free.
			3.C. *Develop environmental codes of practice in 2001 to improve urban sanitation and solid waste management, including an improved system for the proper disposal of medical waste in hospitals and other health facilities.* ➢ The environmental codes of	Developed

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			practice for hazardous waste management, solid waste management and sewerage and sanitation have been issued by the NEC. In addition, regulations for the environmental clearance of projects and regulations on strategic environmental assessment have also been issued by NEC. The hospital wastes—clinical wastes, dressing, solvents, and expired chemicals/medicine—are one of the categories of hazardous wastes under codes of practice for hazardous waste management. As a part of the World Bank-supported HIV/AIDS control project, preparatory planning work has been done for hospital waste management. Partial funding support for hospital waste management would be available from this project for instituting universal precautions and waste management through training, monitoring and procurement of equipment and supplies.	

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D. Adjust Imbalances in Human Resources for Health	***4.1.1.*** *Complete review of gender equity in the staffing of health services.* ➢ A review has been done. About 30% of BHUs have female staff. It is difficult for female staff to work in remote BHUs and do outreach services and home deliveries due to social restrictions and work conditions.			Reviewed; efforts underway to correct the gender imbalances among health staff in BHUs.
		4.2.1. *Review and revise the Human Resource Master Plan to provide a clear plan ensuring adequate human resources are available at all levels of the health system.* ➢ The revised MPHRH was approved by the Minister, MOHE on 24 July 2002, and was made available to all levels of the health system on 30 July 2002. The revised MPHRH reflects an accurate assessment of personnel and training requirements in the health sector and ensures adequate human resources for all levels of the health system.		Implemented
		4.2.2. *Adopt policy to ensure that all BHUs include female staff*		Being implemented

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		who can provide services to female patients. ➢ The 9FYP specified that one of the two to three staff in a BHU must be a female worker.		
			4.A. *Review existing practices in the recruitment and training of village health workers (VHWs) to optimize their role in local communities, by December 2000.* ➢ A booklet titled "Information Kit on Village Health Workers in Bhutan", which gives information on recruitment and training of VHWs, has been published. This booklet, among other things, provides guidelines on how the community could select a VHW.	Reviewed and being implemented.
E. Strengthen Primary Health Care (PHC) through selective interventions and expansion of priority services	***5.1.1.*** *Reactivate the Multisectoral Task Force on STD/HIV issues, and develop an action plan to strengthen the HIV/AIDS surveillance system.* ➢ Multi-sectoral task force on STD/HIV reestablished. Basic action plan developed to strengthen HIV/AIDS			Implemented

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	surveillance system.			
		5.2.1. *Maintain percentage share of health recurrent expenditures in relation to total health sector budget during 2000/2001 at not less than the 1998/1999 level, with the share of PHC's recurrent expenditures maintained at not less than 50% of total recurrent expenditures.* ➢ In 1998/99, the shares of recurrent expenditures in the health budget and primary health care recurrent expenditures were 56.9% and 58.9%, respectively. In 2000/01, their budget shares were 61.9% and 59.2%.		Implemented
			5.A. *Undertake study in 2001 to determine the importance of Haemophilus influenzae b in the epidemiology of acute respiratory infection.* ➢ Report based on study conducted in the pediatric ward of JDWNRH on Hemophilus influenze has been completed. The study showed that 30% of the cases of meningitis were caused by H.influenza b. The study concluded that	Implemented

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			H.influenza b might be important causal factor of acute respiratory infection in Bhutan.	
		5.2.2. *Increase the number of hospitals providing comprehensive reproductive health services, including emergency obstetrical care and clinical family planning, from four to eight, in underserved areas.* ➢ Four more hospitals, namely, Deothang, Gelephu, Samtse and Trashigang, are providing comprehensive reproductive health services, including emergency obstetric care and clinical family planning. Staffing includes a surgeon/ gynecologist, an anesthesiologist/ anesthetist, a nurse, and a laboratory technician; additional equipment is in place.		Implemented and further expanded
			5.B. *Undertake, in 2001, on a pilot basis, a telemedicine project that links the Mongar District Hospital with the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) in Thimpu.*	Implemented

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			➢ The telemedicine project linking the Mongar regional referral hospital with JDWNRH, Thimpu was started in 2000. The computers in the two hospitals were inter-connected. Mongar regional hospital, which had limited facilities and specialists, was able to transmit patient history, clinical examination findings, lab report, X-ray images, electro cardio graph etc. to JDWNRH, where the specialist concerned would access and advise the doctors in Mongar.	
			5.C. *Establish six more indigenous units so that all district hospitals will have such units by 2002.* ➢ Indigenous health units have been established in all the dzongkhags and the district hospitals since 2002. In these facilities, the care seeker has the option either to get allopathic or indigenous treatment.	Implemented
			5.D. *Intensify information, education, and communication*	IEC campaign led to banning sale of

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			(IEC) activities on substance abuse, including alcohol, tobacco and betel through wider coverage of IEC activities in all districts, including underserved areas during 2000–2003. ➢ IEC campaign was undertaken. 18 task forces established at district level.	tobacco in all the districts.

ADB = Asian Development Bank, BHU = basic health unit, Danida = Danish International Development Agency, HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome, HMIS = health management information system, IEC = information, education and communication, JDWNRH = Jigme Dorji Wangchuck National Referral Hospital, MOF = Ministry of Finance, MOH = Ministry of Health, MOHE = Ministry of Health and Education, MPHRH = Master Plan for Human Resources in Health, NCD = noncommunicable disease, NEC = National Environment Committee, 9FYP = Ninth Five-Year Plan, PBM = planning, budgeting and monitoring, PHC = primary health care, PPD = Policy and Planning Division, SAARC = South Asia Association of Regional Cooperation, STD = sexually transmitted diseases, VHW = village health workers.
Source: Asian Development Bank.

STATUS OF COMPLIANCE WITH LOAN COVENANTS

Covenant		Reference in Loan Agreement	Status of Compliance
1.	Except as the Borrower may otherwise agree, all Eligible items to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 of the Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and the Bank.	Article III, Section 3.02	Complied with
2.	The Borrower shall cause the Program to be carried out with due diligence and efficiency and in conformity with sound administrative, financial, engineering, and environmental and health care practices.	Article IV, Section 4.01(a)	Complied with
4.	The Borrower shall make available, promptly as needed, the funds, facilities, services, and other resources, which are required, in addition to the proceeds of the Loan, for the carrying out of the Program and for the operation and maintenance of the Program facilities.	Article IV, Section 4.02	Complied with
5.	The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Program and operation of the Program facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Article IV, Section 4.03	Complied with
6.	The Borrower shall maintain, or cause to be maintained, records and accounts adequate to identify the Eligible items financed out of the proceeds of the Loan and to record the progress of the Program.	Article IV, Section 4.04(a)	Complied with
7.	The Borrower shall enable the Bank's representative to inspect any relevant records and documents referred to in paragraph (a) of this Section.	Article IV, Section 4.04(b)	Complied with
8.	The Borrower shall furnish, or cause to be furnished, to the Bank all such reports and information as the Bank shall reasonably request concerning (i) the Loan, and the expenditure of the proceeds of the Loan; (ii) the Counterpart Funds and the use thereof; (iii) the implementation of the Program, including the accomplishment of the targets and carrying out of the actions set out in the Policy Letter; (iv) financial and economic conditions in the territory of the Borrower and the international balance-of-payments position of the Borrower; and (v) any other matters relating to the purposes of the Loan.	Article IV, Section 4.05(a)	Complied with
9.	Without limiting the generality of the foregoing, the Borrower shall furnish, or cause to be furnished, to the Bank quarterly reports on the carrying out of the Program and on the accomplishments of the targets and carrying	Article IV, Section 4.05 (b)	Partly complied with. In place of quarterly progress reports,

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out of the actions set forth in the Policy Letter. Such reports shall be submitted in such form and in such detail and within such a period as the Bank 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 the proposed program of activities and expected progress during the following quarter.		BHTF submitted Annual Progress Reports, and minutes of the ISC meetings which gave adequate information on progress of the Program. In addition, all copies of studies and reports on policy actions were submitted to ADB.
10. Promptly after physical completion of the Program, but in any event not later than 3 months thereafter or such later date as may be agreed for this purpose between the Borrower and the Bank, the Borrower shall prepare and furnish to the Bank a Program Completion Report (PCR), in such form and in such detail as the Bank shall reasonably request, on the execution of the Program, including its cost, the performance by the Borrower of its obligations under this Loan Agreement and the accomplishment of the purposes of the Loan. The PCR shall include an evaluation of the benefits of the Program based on the baseline indicators developed through the data generated by the April 2000 health sector survey of the Borrower and the joint poverty assessment study of the Borrower and the Bank.	Article IV, Section 4.05(c)	Complied with
11. Except as provided in paragraph 2(b) below, each contract for Eligible items shall be awarded on the basis of either the purchaser's normal commercial procurement practices, in the case of procurement from the private sector, or the Borrower's prescribed procurement procedures, in the case of procurement by the public sector, having due regard for the principles of economy and efficiency.	Schedule 4, paragraph 2(a)	Complied with
12. Each supply contract for Eligible items which are traded commodities shall be awarded on the basis of procedures appropriate to the trade and acceptable to the Bank.	Schedule 4, paragraph 2(b)	Complied with
13. The Borrower shall ensure that all Bank-financed goods procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.	Schedule 4, paragraph 3(a)	Complied with
14. The Borrower shall ensure that all Bank-financed	Schedule 4,	Complied with

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contracts for the procurement of goods contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.	paragraph 3(b)	
15. The MOHE shall be the Program Executing Agency responsible for carrying out the Program.	Schedule 5, paragraph 1	Complied with; the MOH became the EA after the bifurcation of MOHE into MOH and MOE in July 2003.
16. The MOHE shall chair an inter-ministerial committee (ISC) with representations from the other ministries and offices of the Borrower that have a stake in the Policy Matrix including the Ministry of Finance, Ministry of Trade and Industry, the Planning Commission, the National Environment Commission, and the Royal Civil Service Commission. Initially, the ISC shall meet not less than once each quarter, and shall serve as a coordinating and monitoring mechanism and provide policy oversight in Program implementation. After the release of the second tranche, the ISC shall meet not less than twice a year while maintaining its coordinating and monitoring role.	Schedule 5, paragraph 2	Complied with; copies of minutes of 9 ISC meetings were provided to ADB.
17. The ISC shall be supported by a Program Management Unit (PMU) established within MOHE. The PMU shall be headed by a Program Director and shall be responsible for the day to day monitoring of progress in meeting the policy actions required for the First and Second Tranche. The PMU shall also be responsible to prepare quarterly Program implementation progress reports for the ISC and for provision of the same to the Bank. The reports shall include the report on performance of the BHTF and its investments including use of proceeds thereof.	Schedule 5, paragraph 3	Complied with; the Program Director of BHTF was also assigned as Program Director for day-to-day monitoring of the progress in meeting the policy actions required for the First and Second Tranche, and preparing progress reports and performance of BHTF needed for ISC meetings.
18. The Borrower shall ensure that the Counterpart Funds are used to finance the local currency costs relating to the implementation of the programs and other activities consistent with the objectives of the Program, as more fully described under paragraph 1 of Schedule 1 to the Loan Agreement and the Policy Letter, and shall, in particular, provide necessary appropriations in support of	Schedule 5, paragraph 4	Complied with

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priority programs and projects implemented by MOHE satisfactory to the Bank for this purpose.		
19. The Borrower shall ensure (i) initial capitalization of the Bhutan Health Trust Fund (BHTF) of at least $5 million within 3 months after the release of the First Tranche and (ii) actively coordinate with other funding agencies to further mobilize its capital to reach the required target of $24 million and shall match such funding agency contributions on a one-to-one basis. The Borrower shall meet any shortfall in meeting the expenditures under the program activities of the BHTF either from its budgetary or other sources.	Schedule 5, paragraph 5	Complied with
20. The Borrower shall ensure that the BHTF shall be exempted from income tax, payment of customs and import duties, and excise duty on vaccines, drugs, needles, syringes, cold chain equipment, and other related drugs/equipment purchased for carrying out the program activities of the BHTF.	Schedule 5, paragraph 6	Complied with
21. The Borrower shall ensure that, for the duration of the program, any changes to the BHTF Royal Charter will be carried out after prior consultation with the Bank. In the event of termination or dissolution of the BHTF, the remaining assets of the trust fund under the BHTF shall be utilized, first to meet the objectives of the BHTF under the BHTF Royal Charter and thereafter for financing related development activities under the health sector.	Schedule 5, paragraph 7	Not applicable, as there was no change in the BHTF Royal Charter.
22. The Borrower shall ensure that the BHTF is professionally managed through the services of an international fund manager using investment guidelines, authorized relationships and reporting modalities provided by the Board, to achieve the objectives of the BHTF in an efficient manner.	Schedule 5, paragraph 8	Due to extreme volatility in the global capital markets in early 2000 and change in ownership of an investment firm with which the Government had previous dealings, the services of international fund manger were not used. The Government selected 1983 Investment Advisors Inc. and First Union National Bank of

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		Pennsylvania as the investment manager and the custodian of the fund respectively, but withdrew from this arrangement because of a change in ownership of the investment management firm.
23. Without limiting the generality of Section 5 of the Loan Agreement, the Borrower shall ensure that the annual reports of the BHTF including its audited financial statements are made available to the Bank on an annual basis promptly after their preparation but in any even not later than 6 months after the close of the year to which they related.	Schedule 5, paragraph 9	Not complied with; annual audit reports have not been carried out. Instead, an audit for accounts from 1998 to June 2005 has been carried out, and the Audited Report will be available by September 2006. The accounts will be audited annually thereafter.
24. The Borrower shall ensure that in implementing expanded user charges for services under the health sector, access to essential services by the people will not be adversely impacted.	Schedule 5, paragraph 10(a)	Complied with
25. The Borrower shall ensure that the draft of the proposed schedule on user charges, as prepared based on the Pilot Study, shall be discussed through public discussions prior to their introduction in the Ninth Five-Year Plan.	Schedule 5, paragraph 10(b)	Complied with
26. The Borrower shall coordinate with nongovernment or community-based organizations, as appropriate, to enhance the impact of developmental activities under the Program, in particular in those areas of Bhutan with inadequate coverage of health services.	Schedule 5, paragraph 11	Complied with
27. The Borrower shall ensure use of the latest data generated by the April 2000 health survey in developing baseline performance indicators for the health sector under the Program.	Schedule 5, paragraph 12	Complied with

Covenant	Reference in Loan Agreement	Status of Compliance
28. The Borrower shall ensure use of the data generated by the joint Borrower/Bank poverty assessment exercise to develop the baseline indicators for monitoring impact poverty reduction under the Program.	Schedule 5, paragraph 13	Complied with
29. The Borrower shall use the Annual Health Conference as a feedback mechanism for assessing the impact of the Program on the health sector.	Schedule 5, paragraph 14	Complied with
30. The Borrower shall ensure that (i) recurrent expenditures, as a percentage share of the total health sector budget, will not fall below the level of 1998/1999 during implementation of the Program, and (ii) within the total health recurrent expenditures, the share of recurrent budget allocated to PHC shall also not fall below 50% during implementation of the Program.	Schedule 5, paragraph 15	Complied with
31. The Borrower shall ensure that the policies adopted and actions taken before the date of the Loan Agreement, as described in the Policy Letter and the Policy Matrix, will continue to be in effect for at least the duration of the Program.	Schedule 5, paragraph 16	Complied with
32. The Borrower shall adopt the policies and take such other actions included in the Program and Policy Letter, in a timely manner and shall ensure that such policies and actions will continue to be in effect for the duration of the Program and where appropriate, adopted under the Ninth Five-Year Plan.	Schedule 5, paragraph 17	Complied with
33. A midterm review of the Program, including its impact on poverty and vulnerable groups, shall be carried out jointly by the Borrower and the Bank in 2003.	Schedule 5, paragraph 18	Complied with; MTR was carried out on 3–11 June 2004

ADB = Asian Development Bank, BHTF = Bhutan Health Trust Fund, EA = executing agency, ISC = inter-ministerial steering committee, MOH = Ministry of Health, MOHE = Ministry of Health and Education, MTR = mid-term review, PCR = program completion report, PHC = primary health care, PMU = program management unit.

BHUTAN HEALTH TRUST FUND

1. The Government established the Bhutan Health Trust Fund (BHTF) on the basis of a Royal Charter. The trust fund mechanism for the health sector was conceived with technical advice from World Health Organization, following the Government's experience with the successful Bhutan Trust Fund for Environmental Conservation, which was launched in 1992 with multi-funding agency support and technical assistance from several external sources. The BHTF was to be developed as a sustainable financing mechanism that was expected to generate funds to cover annual expenditures on essential drugs, vaccines, and new technologies, which were expected to increase from $0.9 million in 1999 to $2.3 million in 2008. The Government gave its assurance that the BHTF will adopt internationally acceptable practices with respect to fund administration and investment management.

2. The BHTF was launched in May 1998 with the primary objective of ensuring a continued and timely supply of vaccines and essential drugs, and to eliminate financial uncertainties involved in their purchase. BHTF was envisaged so that returns on fund investments would cover the annual expenditures on vaccines and essential drugs. Since the establishment of the full-time Secretariat for the BHTF in April 2000, the Fund has made significant progress and accumulated $19 million by end of June 2006 (Table A4.1).

3. The amount raised so far has fallen short of the target of $24 million set by the BHTF. Nevertheless, some of the efforts made to raise money for the BHTF are exemplary. Approximately $1.7 million was mobilized through the "Move for Health Walk", undertaken by the Honorable Lyonpo Sangay Ngedup (then minister of health and education) along with six other volunteers, who walked 560 kilometers from Trashigang to Thimpu from 25 September 2002 to 15 October 2002. The Government is pursuing a number of potential bilateral donors—e.g., Canada, Japan, Singapore—and various foundations and individuals for further capitalization of the BHTF. Efforts to give wider publicity to and increase awareness about the BHTF are being attempted through periodic press releases, high profile events like the health walk, publication of brochures and booklets, etc. The BHTF also has a website where interested funding agencies can readily get additional information (www.bhtf.gov.bt). This site is also interlinked with the "move for health walk" website (www.move4health.gov.bt).

4. The management board of the BHTF consists of seven members who are appointed by the Government for an initial period of 3 years. The members are from the Ministries of Health, Finance and Trade and Industries as well as from the Royal Monetary Authority of Bhutan and the Bhutan Health Trust Fund Secretariat. The United States tax exemption on the proposed investments of the fund has been obtained. The BHTF was recognized as a tax-free organization in June 2002, to attract contributions from both private and public organizations, and has been operationalized from the 2004 fiscal year (FY). An amount of $2,744 was released to the Department of Medical Services for the purchase of Hepatitis B vaccine in FY2004. During FY2005, $23,336 was released for the purchase of anti-rabies and Hepatitis B vaccines. In FY2006, $69,0000 was released for the purchase of rubella vaccines (Table A4.2).

5. The BHTF's dollar-denominated funds are currently lodged in short-term deposits in the bank accounts in the United States, while the ngultrum-denominated amount has been invested in higher yield Druk Air bonds and other fixed deposits (Table A4.3). The Government is exploring different options for professional management of the BHTF through the services of an international fund manager using investment guidelines, authorized relationships and reporting modalities provided by the Board of the BHTF, to achieve the

objectives of the BHTF in an efficient manner. The poor performance of other Bhutan trust funds, especially following September 11, 2001, has made the Board of BHTF cautious. Overall, the international fund manager will need to manage the investments to guarantee an income of a certain level above the U.S. inflation, taking into account international benchmarks for investments in similar funds.

Table A4.1: Financing Sources of Bhutan Health Trust Fund

Funding Agencies	Amount ($)
Government of Bhutan including ADB-financed	11,838,758.42
Move for Health Walk	1,774,871.89
B & M Gates Foundation	1,000,000.00
The Summit Foundation	1,000,000.00
Govt. of Norway	988,371.88
Govt. of. Australia	63,850.00
Govt. of New Zealand	53,374.33
Dr. Franz H. Rhomberg	38,960.00
Schools	33,104.93
Pvt. Sector of Bhutan	25,038.42
UNICEF	15,000.00
Dr. Richard Harvey & Friends	9,682.69
Save the Children	5,000.00
Ms. Nancy Strickland	1,111.11
Interest	2,402,376.47
Total	**19,249,500.14**

ADB = Asian Development Bank, UNICEF = United Nations Children's Fund.
Source: Bhutan Health Trust Fund.

Table A4.2: Investment of Bhutan Health Trust Fund

Investment	Amount Invested ($)
Druk Air Bond (7.5% interest bearing)	556,933.33
Government of Bhutan (5.5% interest)	15,851,137.15
State Bank of India, USA (5%)	1,152,502.72
Bank of Bhutan, Bhutan (3%)	1,688,718.08
Total	**19,249,291.28**

Source: Bhutan Health Trust Fund.

Table A4.3: Utilization of Bhutan Health Trust Fund

Year	Purpose	Amount ($)
2003–2004	Hepatitis B Vaccines	2,744.44
2004–2005	Hepatitis B & Anti Rabies Vaccines	23,335.56
2005–2006	Rubella Vaccines	69,000.00
Total		**95,080.00**

Source: Bhutan Health Trust Fund.

PROGRESS ON HEALTH-RELATED MILLENNIUM DEVELOPMENT GOALS[1]

1. As per the assessment made by the Government of Bhutan in 2005 with the technical assistance from United Nations Development Programme, Bhutan continues to make significant and sustained progress and is potentially on track to achieve all the Millennium Development Goals (MDGs) before 2015, including all health-related MDGs (Table A5.1).

A. Maternal and Child Health

2. **Child Mortality.** Based on the assessment made in 2005, Bhutan is likely to attain the goal of reducing child mortality much earlier than 2015. From 1990 to 2000, mortality of under-5 children has been reduced by one-third. The infant mortality rate (IMR) was reduced by a third from 90 deaths per 1,000 live births to 60.5 per 1,000 live births between 1990 and 2000. The country is currently on track to reduce IMR by two thirds even before the target year of 2015. With further strengthening of institutional deliveries and the emphasis on all births being attended by skilled personnel, both neonatal and infant deaths are expected to decline significantly.

3. **Maternal Mortality and Morbidity**. The proportion of births attended by skilled health personnel has more than doubled between 1990 and 2003 (from 15% to 32%). A major hurdle to increase the births attended by skilled health personnel is the highly dispersed nature of settlements and the walking distance from households to the local health units. Emergency obstetric care services are also being expanded and strengthened. The national maternal health targets set for the Ninth Five-Year Plan period include reducing the maternal mortality rate to below 163 per 100,000 live births; achievement of this target would indicate a progress rate sufficient to achieve the MDG target by 2015.

B. Combat HIV/AIDS,[2] Malaria, and Other Diseases

4. **Status and Trends of HIV/AIDS.** The HIV/AIDS infection in Bhutan remains at a relatively low level. Crude projections based on various scenarios of the situation indicate that with adequate prevention controls in place, the human immunodeficiency virus (HIV) infection would peak by 2012 and subsequently be reversed. The number of detected HIV positive cases in Bhutan has risen significantly from 38 in 2000 to 74 as of October 2005. The proportion of infection is almost equal in both sexes (39 males and 35 females). On the basis of available evidence, the HIV/AIDS epidemic in the country appears to be in an early phase with an overall prevalence rate of about 0.01%. However, there are many risk factors including proximity to population groups in the region with high HIV prevalence rates, the presence of sex workers in border towns, the high mobility across borders, the relatively common incidence of sexually transmitted diseases, the emerging issue of substance abuse, and the country's young demographic profile.

5. **Contraceptive Prevalence Rate and Condom Usage.** The contraceptive prevalence rate (CPR) increased from 18.8% in 1994 to 30.7% in 2000. Condom usage increased from 4% in 1994 to 13% in 2000. Family planning activities are being sustained through effective advocacy

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[1] This appendix is prepared from the Government of Bhutan. 2005. *Bhutan Progress Report 2005: Millennium Development Goals.* Thimpu, Bhutan (prepared with the technical assistance of UNDP).

[2] Human immunodeficiency virus/acquired immunodeficiency syndrome.

and adequate supply of services. Emergency contraceptive services have recently been included in family planning services.
ulletins 2003

6. **Malaria.** In 1991 there were 22,126 cases per annum, which were reduced to 5,935 cases per annum by 2000, and further reduced to 2,760 cases in 2004. The incidence of malaria has reduced from 3,687 per 100,000 in 1991 to 366 per 100,000 in 2004. Along with the decline in malarial morbidity, mortality from malaria has shown a general decrease. From 63 deaths caused by malaria in 1993, only 15 deaths were recorded in 2000 and 5 in 2004. From these trends it appears that the incidence of malaria is declining and the goal of halting the spread of malaria is potentially achievable.

7. **Tuberculosis.** The incidence of tuberculosis has declined significantly, from 720 cases per 100,000 in 1990 to 168 in 2000, and 143 in 2004. On the basis of this steep decline, it is highly probable that the goal of halting and reversing the spread is achievable. Tuberculosis related deaths were erratic and averaged 45 deaths a year. At 133 cases per 100,000, Bhutan still has a high tuberculosis burden for the region. In 2004, the country reported 1,002 cases, of which 598 were pulmonary tuberculosis.

Table A5.1: Progress on Health Related MDGs

Item	1990	2000	2004	2015	State of Progress
Goal 4: Reduce Child Mortality					
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate					
• Under-5 mortality rate (per 1,000 live births)	123	84		41	On track
• Infant mortality rate (per 1,000 liver births)	90	60.5		30	On track
• Proportion of children covered under immunization program	84%	85%	90% with cards	>95%	On track
Goal 5: Improve Maternal Health					
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ration					
• Maternal mortality rate (per 100,000 live births)	560	255		140	On track
• Births attended by skilled health personnel	15%	24%	32%	100%	On track
Goal 6: Combat HIV/AIDS, Malaria, and Other Diseases					
Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS					
• HIV cases detected	0	38	74		On track
• Contraceptive prevalence rate	18.80%	30.70%		60	On track
Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases					
• Number of malaria cases and incidence (cases per 100,000 people)	22,126	5.935	2,760		On track
• Number of tuberculosis cases and incidence (cases per 100,000 people)	4,232	1,140	1,002		On track

HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome, MDGs = Millennium Development Goals.