Document of
The World Bank

Report No. 19141-CHA

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN OF US$10.0 MILLION AND A

PROPOSED CREDIT OF SDR 36.8 MILLION

TO THE

PEOPLE'S REPUBLIC OF CHINA

FOR A

HEALTH NINE PROJECT

April 14, 1999

Human Development Sector Unit
East Asia and Pacific Regional Office

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 1998)

Currency Unit	=	Renminbi (RMB)
RMB 1.00	=	US$0.12
US$1	=	Y 8.3

FISCAL YEAR

January 1 to December 31

ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
BBI	-	Blood Borne Infections
CAPM	-	Chinese Academy for Preventive Medicine
CAS	-	Country Assistance Strategy
DALY	-	Daily Adjusted Life Year
DCD	-	Disease Control Department, of MOH
EPI	-	Expanded Program on Immunization
EPS	-	Epidemic Prevention Station
FLO	-	Foreign Loan Office, of MOH
HIV	-	Human Immunodeficiency Virus
IBRD	-	International Bank for Reconstruction and Development
ICB	-	International Competitive Bidding
IDA	-	International Development Association
IEC	-	Information, Education and Communication
IMR	-	Infant Mortality Rate
IRR	-	Internal Rate of Return
MAD	-	Medical Administration Department, of MOH
MCH	-	Maternal and Child Health
MIS	-	Management Information System
MMR	-	Maternal Mortality Rate
MOF	-	Ministry of Finance
MOH	-	Ministry of Health
NCB	-	National Competitive Bidding
PIP	-	Project Implementation Plan
PMO	-	Project Management Office
RMC	-	World Bank Resident Mission in China
SDR	-	Special Drawing Right
SDPC	-	State Development and Planning Commission
SOE	-	Statement of Expenditure
STD	-	Sexually Transmitted Disease
U5MR	-	Under Five Mortality Rate
UNICEF	-	United Nations Children's Fund
WHO	-	World Health Organization

Regional Vice President:	Jean-Michel Severino, EAPVP
Country Director:	Yukon Huang, EACCF
Sector Manager:	Alan Ruby, EASHD
Task Team Leader/Task Manager:	Jagadish Upadhyay, EASHD

CHINA
HEALTH NINE PROJECT

TABLE OF CONTENTS

Project Financing Data 1

A. Project Development Objective 2

1. Project Development Objective and Key Performance Indicators 2

B. Strategic Context 2

1. Sector-related Country Assistance Strategy (CAS) Goal Supported by the Project 2
2. Main Sector Issues and Government Strategy 2
3. Sector Issues to be Addressed by the Project and Strategic Choices 3

C. Project Description Summary 4

1. Project Components 4
2. Key Policy and Institutional Reforms Supported by the Project 6
3. Benefits and Target Population 7
4. Institutional and Implementation Arrangements 8

D. Project Rationale 9

1. Project Alternatives Considered and Reasons for Rejection 9
2. Major Related Projects Financed by the Bank and Other Development Agencies 10
3. Lessons Learned and Reflected in the Project Design 11
4. Indications of Borrower Commitment and Ownership 11
5. Value Added of Bank Support in this Project 12

E. Summary Project Analysis 12

1. Economic 12
2. Financial 12
3. Technical 13
4. Institutional 13
5. Social 13
6. Environmental Assessment 14
7. Participatory Approach 14

F. Sustainability and Risks 15

1. Sustainability 15
2. Critical Risks 15
3. Possible Controversial Aspects 16

G. Main Loan Conditions 16

1. Effectiveness Conditions 16
2. Other Conditions 16

H. Readiness for Implementation 18

I. Compliance with Bank Policies 18

List of Annexes

Annex 1: Project Design Summary 19
Annex 2: Project Description 27
Annex 3: Estimated Project Costs 36
Annex 4: Economic Analysis 37
Annex 5: Financial Summary 45
Annex 6: Procurement, Disbursement and Finance 49
Table A: Project Costs by Procurement Arrangements 53
Table B: Thresholds for Procurement Methods and Post Review 54
Table C: Allocation of Loan/Credit Proceeds 55
Annex 7: Project Processing Budget and Schedule 58
Annex 8: Documents in the Project File 59
Annex 9: Status of Bank Group Operations in China 60
Annex 10: China at a Glance 62

IBRD MAP No. 30065

China
Health Nine Project

Project Appraisal Document

East Asia and Pacific Regional Office
Human Development Sector Unit

Date:	April 14, 1999	Task Team Leader/Task Manager:	Jagadish Upadhyay
Country Manager/Director:	Yukon Huang	Sector Manager:	Alan Ruby
Project ID: CN-PE-36953	Sector: HNP	Program Objective Category:	
Lending Instrument:	SIL	Program of Targeted Interventions:	[X] Yes [ ] No

Project Financing Data [X] **Loan** [X] **Credit** [ ] **Guarantee** [ ] **Other [Specify]**

For Loans/Credits/Others:

Amount (US$m/SDRm): IBRD Loan $10 million/IDA Credit SDR 36.8 million ($50 million equivalent)

Proposed Terms: [ ] Multicurrency [X] Single currency, specify
[X] Standard Variable [ ] Fixed [X] LIBOR-based

	IBRD Loan	IDA Credit
Grace period (years):	5	10
Years to maturity:	20	35
Commitment fee:		0.50%
Contractual rate:	0.75%	
Service charge:		0.75%

Financing plan (US$m): 93.91 million

Source	Local	Foreign	Total
Government	33.87	-.-	33.91
IDA	30.60	17.43	50.00
IBRD	7.65	4.36	10.00
Total	72.12	21.79	93.91

Borrower: The People's Republic of China
Responsible agency: Ministry of Health

Estimated disbursements (Bank FY/US$m):	1999	2000	2001	2002	2003	2004	2005
Annual	0.92	4.88	7.44	10.85	15.03	12.42	8.46
Cumulative	0.92	5.80	13.24	24.09	39.12	51.54	60.00

Project Implementation Period: 6 years

Expected effectiveness date: August 15, 1999. Expected closing date: June 30, 2006

A: Project Development Objective

1. Project development objective and key performance indicators (see Annex 1):

This project has two distinct main components. Component A, Improved Maternal Health and Child Development, would reduce maternal and child mortality and morbidity and improve child survival and development in the poorest areas of China. Component B, Improved Prevention and Control of Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome, Sexually Transmitted Diseases (HIV/AIDS/STDs) and Other Blood Borne Infections, would prevent and control these diseases by implementing comprehensive and multi-sectoral public health programs at the provincial levels, and by building technical capacity at the Central level.

B: Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project (see Annex 1):

CAS document number: R98-107 Date of CAS progress discussion: May 28/29, 1998

1.1 The project directly responds to two main recommendations of the CAS: (a) targeted interventions in poor areas with priority on maternal and child health and disease prevention; and (b) adoption of multi-sectoral approaches to prevent and control non-communicable diseases, sexually transmitted diseases, and Human Immunodeficiency Virus in high-risk areas. The project is also consistent with the Bank's most recent health sector report in China, China: Issues and Options in Health Financing, (Report No: 15278-CHA, dated August 12, 1996), which emphasizes the need to strengthen public health programs and ensure essential health services to the poor.

1.2 The project responds to the targeted intervention goal of CAS by replicating the successful experience of the Comprehensive Maternal and Child Health Project (Cr. 2655-CHA; Health VI), to reduce the negative effects of poverty by improving maternal and child health status indicators in an additional 113 low income counties in five relatively rural and low income provinces covering nearly 51 million persons (four percent of China's population). It would respond to another CAS objective of spearheading efforts in preventing and controlling emerging diseases like HIV/AIDS and STDs by implementing bold and effective programs in 31 prefectures in four provinces, which are considered to be high risk areas, with a combined population of 94 million, and by strengthening the capacity at the level of the Central Government.

2. Main sector issues and Government strategy:

2.1 Despite remarkable improvements in the health status of its population, China still faces serious disparities between rich and poor regions. For example, the national maternal mortality ratio (MMR) was 61.9 per 100,000 live births and the average rural MMR was 76 per 100,000 in 1995. However, in 1996 and 1997, the MMR in the counties of the five project provinces were: 62.7 in Hainan, 79.9 in Hunan, 262.3 in Guizhou, 68.5 in Jilin, and 462.8 in Xinjiang. Similarly, the national infant mortality rate (IMR) was 36.4 per 1,000 live births, but the comparable IMR in the project provinces was: 45.0 in Hainan, 39.3 in Hunan, 72.3 in Guizhou, 49.7 in Jilin, and 84.3 in Xinjiang. Special surveys indicate that these rates are likely to be considerably underestimated (50 to 100 percent) in the poorer provinces. Access to health care is also significantly inequitable, with deep divisions between the urban and rural population. While China's total public and private health spending per capita was RMB 110 per year in 1993, the average health spending of RMB 235 per capita in urban areas was almost four times the average of RMB 60 per capita in rural areas, and the poorest quartile of the rural population only accounted for about four percent

of all health spending.[1] To improve the situation, the Government has been implementing targeted interventions in designated poorest counties.

2.2 After fast and steady progress until the middle of the 1980s, the rate of improvement in China's health status has slowed and may have reversed in certain cases. This is attributed mainly to reduced access to health services among poorer families after the collapse of the cooperative medical system in the late 1970s, and inadequate resources allocated for public and preventive health. The Government has realized this problem and has started promoting various risk-sharing and subsidy schemes. Recently, the Government has also asked the provinces to substantially increase allocations for health, especially for preventive health activities.

2.3 Rapid economic growth, reform measures, growing openness, and the country's epidemiological transitions have brought new health problems, including a major increase in chronic diseases, the emergence of HIV/AIDS infections, and the reemergence of STDs. Perhaps no new health problem in China is more critical than the accelerating speed of the spread of HIV coupled with rapidly increasing STD infections. The first AIDS case in China was reported in 1985. This was followed by increasing number of HIV cases among drug-users in southwest Yunnan Province with the identification of 149 cases in 1989. By late 1997, over 8,000 HIV infections were officially reported, and the actual number is believed to be much larger. Using stratified analysis, it was estimated that there were 10,000 HIV infections by 1993, and scientists at the Chinese Academy of Preventive Medicine (CAPM) and selected provincial epidemic prevention centers estimated that there were between 150,000 to 200,000 HIV infections in China by the end of 1996.[2] It is currently estimated that there are over 300,000 HIV infections in China. Exacerbating this situation, while STDs were believed to have been eliminated from China by the 1970s, they have increased alarmingly since then. In 1995, reported STD cases numbered 362,000, but experts estimate that real figures may be ten times greater.

2.4 In response to the first HIV infections diagnosed in China in 1985, a National AIDS Committee was set up in 1986, followed in 1987 by the establishment of a National Programme for AIDS Prevention and Control. MOH adopted a plan for AIDS prevention and control in 1990, in line with global policies modified to reflect Chinese characteristics. In October 1996, State Councilor Ms. Peng Peiyun delivered a speech at the National Conference on HIV/AIDS Prevention and Control, asserting that the "Government has placed AIDS prevention and control among the priorities of the Ninth Five-Year Plan and China's Twenty-first Century Agenda." China recently elaborated its multi-sectoral plan for AIDS prevention and control, to give guidance to national and international partners in matters of AIDS prevention strategies and activities well into the next century.

3. Sector issues to be addressed by the project and strategic choices:

3.1 The Improved Maternal Health and Child Development Component, or the MHCD Component, would address the critical sectoral issue of improving the health status of the poorest sections of the population and help correct the serious regional imbalances persisting in China. The strategic choices, which are consistent with the Government strategy and the CAS, are to: (a) improve the quality and effectiveness of maternal and child health services in the poorest and least developed areas of the country; (b) improve access for the poorest families by helping to remove the economic and cultural barriers to essential obstetric and child care, building on the experience under previous Bank health projects; and (c)

---

[1] China: Issues and Options in Health Financing, August 12, 1996.

[2] China Responds to AIDS, HIV/AIDS Situation and Needs Assessment Report, MOH and Joint UN Programme on HIV/AIDS, October 1997.

cause the provinces and counties to significantly increase resources available for preventive health, especially for maternal and child care.

3.2 The Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections Component, or the HIV/AIDS/STDs Component, would assist the Government to substantially improve the prevention and control of the new health problems arising from emergence of HIV/AIDS and the reemergence of STDs in China. The main strategy would be to implement comprehensive multi-sectoral approaches based on successful experiences in various parts of the world and the experiences already gained in China, including the strengthening of the national capacity to plan and implement such programs, and the carrying out of comprehensive programs in selected high-risk populations of the country.

C: Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

Component	Category	Cost Incl. Contng. (US$M)	% of Total
Project activities are grouped into two main components, covering: A. Improved Maternal Health and Child Development; B. Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections; and a third, Component C, for Project Coordination and Support by provincial and central levels.			
A. Improved Maternal Health and Child Development (MHCD)			
A1. *Improved Quality of Basic MHCD Care Services*. This subcomponent will support: (i) basic mother and child health package; (ii) improved maternal care through systematic prenatal care, appropriate obstetric care, labor and delivery care, and effective management of high-risk pregnancies; (iii) integrated sick child care through effective management of childhood illness, malnutrition, and newborn care; and (iv) improved well-child and systematic newborn care through nutrition interventions and preventive care.	Policy, Physical, Institution Building	25.1	26.7
A2. *Improved Family and Community Participation and Education*. This subcomponent will support: (i) premarital counseling services; (ii) action-oriented health education materials for families; (iii) prevention and treatment of priority diseases; (iv) promotion and monitoring of nutrition; (v) parenting skills to foster children's psychosocial development; and (vi) design and production of child development and maternal health information, education, and communication materials.	Policy	6.6	7.0

Component	Category	Cost Incl. Contng. (US$M)	% of Total
A3. ***Improved Management of MCH Services***. This subcomponent will support: (i) improved planning and coordination of MCH services; (ii) improved quantity and quality of supervisory support between levels; (iii) improved function and use of MCH management information and surveillance systems; and (iv) operational research.	Institution Building	6.7	7.1
A4. ***Improved Health Workers' Training***. This subcomponent will improve the technical and clinical competence of MCH staff through a comprehensive training program.	Policy	12.1	12.9
A5. ***Improved Access to MCH Care Services***. Through poverty relief funds for the very poor, this subcomponent will develop and implement a program of medical financial assistance, including an essential package of services and use of finance mechanisms.	Policy, Institution Building	2.8	3.0
B. <u>Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections</u>			
B1. ***Improved and Expanded Policy Environment***. This subcomponent will: (i) raise awareness and commitment at all levels; (ii) strengthen multi-sectoral collaboration; (iii) build capacity of public and private sectors, and non-government institutions; (iv) integrate HIV/AIDS/STDs and other blood borne infections (BBI) programs into other health services; and (v) support policies on syndromic management.	Policy, Institution Building	4.3	4.6
B2. ***Improved HIV/AIDS/STDs Interventions and Support***. This subcomponent will support: (i) innovative and cost-effective programs to prevent and control HIV/AIDS/STDs; (ii) changes in behavior to reduce risks; (iii) improved STDs management; (iv) condom social marketing; and (v) patient care and support.	Policy	13.5	14.4
B3. ***Improved HIV/AIDS/STDs Surveillance System***. This subcomponent will develop and expand a surveillance system to monitor epidemic and behavioral trends, influence policy, inform project design, and measure the impact of interventions.	Policy	6.6	7.0

Component	Category	Cost Incl. Contng. (US$M)	% of Total
B4. ***Improved Management of Blood Transfusion Services***. This subcomponent will support: (i) transition from a voluntary paid donor supply of blood to a quality assured program of voluntary unpaid blood donations; (ii) quality assurance for blood testing, processing, storage and delivery; (iii) development, dissemination, and promotion of clinical guidelines for good transfusion practice by clinicians; (iv) training of blood service and clinical staff; and (v) increased resources to support the voluntary blood donation program. Increasing the availability of a safe blood supply will not only reduce transmission of BBIs but should increase availability of blood for critical transfusion requirements such as trauma and maternal hemorrhage.	Policy	8.9	9.5
C. **Project Coordination and Support** This national level component will help to: (i) develop and implement policies necessary to attain project objectives; (ii) provide necessary coordination and support to the provinces to plan, supervise, monitor and report on project progress; (iii) facilitate and provide technical assistance to the provinces; (iv) implement research and other activities best suited to be implemented at the Central level; (v) replicate successful practices to non-project areas; and (vi) support the establishment of a National AIDS Reference Laboratory (NARL).	Institution Building, Project Management	7.3	7.8
PROJECT TOTAL		**93.9**	**100.0**

Note: Differences due to rounding.

2. Key policy and institutional reforms supported by the project:

The proposed project includes strong policy and institutional reform measures.

2.1 Under the MHCD Component, the project would: (a) revise and improve the case management protocols for maternal and child care and health workers' training on improved methods and materials; (b) introduce early child development programs; (c) strengthen MCH management at all levels; and (d) establish a system to improve the access of the poorest families.

2.2 The HIV/AIDS/STDs Component would include a number of policy measures, including the training and licensing of private practitioners dealing with STD patients, maintaining anonymity of HIV/STD patients, provide outreach to sex workers and their clients, and drug users, harm reduction measures, and school health and sex education. This component will also support a national reference center to improve the technical capacity in this new field.

2.3 The blood transfusion services subcomponent would assist the Government in initiating a major change in China's practice of blood collection, testing, and clinical use. Specifically, in addition to helping the Government implement the 1997 Blood Donation Law by moving to a voluntary unpaid system of blood donation, the project would also improve safety in testing, storage, and transport of blood, and initiate training and education to improve the use of blood.

3. Benefits and target population:

3.1 Through the MHCD Component, the project will most directly benefit about one million mothers and their newborns each year in 113 of China's poorest counties located in five relatively poor provinces (Guizhou, Hainan, Hunan, Jilin, and Xinjiang) from higher quality and greater access to health services, which have been tested in China and are known to contribute to reductions in MMR and IMR. The Mid-term Evaluation of the Comprehensive MCH Project (Cr. 2655-CHA; Health VI) has shown that the project can be expected to result in significant reductions in the IMR, U5MR, and MMR in the targeted poverty designated counties to levels approaching the national average rates. In addition to these health status benefits, households will also benefit in the following ways: (a) ensuring economic productivity of the families by saving the lives of adult women; (b) ensuring the continuation of non-market produced household goods and services; and (c) reducing medical care costs for MCH related services (especially hospital delivery care) for the most impoverished families in these poor counties via the locally administered poverty relief funds.

3.2 While the direct benefits of the HIV/AIDS/STDs Component will benefit those at highest risk of contracting HIV, STDs, or BBIs in 31 prefectures in the four target provinces (Fujian, Guangxi, Shanxi, and Xinjiang), it is expected that effective dissemination of successful strategies and practices developed in the project provinces will significantly strengthen the capacity of the Central level to oversee the prevention and control of these diseases, thereby benefiting the whole country. The reported cases of HIV in the four project provinces are nearly 2,000 but the real numbers are estimated at ten times higher. The reported cumulative STDs cases were 218,089 since 1993. Considerable benefits will be realized for those households and families which do not become infected with or can be successfully treated for HIV/AIDS/STDs. The international research findings documented in the recently published World Bank book, Confronting AIDS: Public Priorities in a Global Epidemic, 1998, show that these benefits can be considerable.

3.3 In addition to those already infected with HIV/AIDS/STDs and other BBIs, many people are at risk of infection, especially those who engage in high risk behavior such as intravenous drug use, use or provide commercial sex. Commercial blood and plasma donors have also infected or placed at risk patients, through unsafe blood or plasma collection practices. This population size varies from province to province as the modes of transmission differ in each province, but it is likely that, at a minimum, one to two percent of the population in these four provinces are at risk of HIV/STDs, amounting to 1.3 to 2.6 million persons. In addition, to the extent that a number of persons involved in inter-provincial or international trade within the borders of the four provinces have high risk behaviors, they will also be direct beneficiaries. Since there are many internal migrants within China today, especially to the provinces of Fujian, Guangxi, and Xinjiang, this target population could amount to additional millions of persons. The ultimate impact of the prevention program, and the replication of successful models of intervention, is expected to reach the general population, far beyond the targeted high-risk populations.

3.4 The blood transfusion services subcomponent would contribute to help the Government make dramatic changes in the collection, handling, and use of blood in medical care. The present collection is overwhelmingly through mandatory and commercial methods, which the Government wants change in favor of voluntary methods, and the magnitude of blood product use in medical care in China is considered to be too high, which the Government wants to rationalize. The most direct beneficiaries of improved management of blood transfusion services under the project are those who obtain blood products during the treatment of their health problem(s), at the risk of transmission of BBIs, including hepatitis and HIV. Since HIV/AIDS, Hepatitis B, Hepatitis C, and many other infections can be transmitted via untested blood, and since the cases of AIDS in Shanxi Province (and to a lesser extent Xinjiang Province) were infected by

unsafe blood collection practices, the most direct beneficiaries would be those residing in those two localities. Improved blood supply will directly benefit women in the project areas by addressing the number one cause of maternal mortality and morbidity, which is post-partum hemorrhage. As project experience spreads, residents of other provinces will also become beneficiaries, especially where there is a significant share of blood donated from commercial donors.

3.5 There are seven main institutional benefits of the project. First, the MHCD Component will help to increase public resource allocation for basic preventative health services. Second, it will introduce an improved health workers training program. Third, it will introduce improved management practices into the system of maternal and neonatal care. Fourth, it will introduce participatory methodology for the development of health education materials, counseling, and communications strategies, which will also strengthen program evaluation. The HIV/AIDS/STDs Component will strengthen central and provincial government capacity to plan and implement effective programs to prevent and control these diseases. Fifth, improved management of blood transfusion services will develop effective national policies to improve the collection, quality, and use of blood products. Sixth, it will also strengthen provincial and local efforts to rationalize blood products use in health service provision. Finally, the national HIV/AIDS laboratory will develop improved testing methods and procedures to improve HIV testing accuracy and train provincial and local personnel in implementing them.

4. Institutional and implementation arrangements:

4.1 ***Implementation***. The project will be implemented over six years, beginning in early FY00. The Ministry of Health (MOH) will be responsible for overall coordination of project implementation and conduct of national level activities. MOH has established a Project Leading Group chaired by the Minister of Health with representatives of the MOH Foreign Loan Office (FLO) and the Departments of Maternal and Child Health (MCH), Disease Control (DCD), Medical Administration (MAD), and Finance and Planning. FLO will act as secretariat of the Leading Group, coordinate project management, and hold responsibility for reporting requirements. The responsibility for technical coordination and direct supervision of implementation will lie with MOH departments, including MCH, DCD, and MAD. For each of the MHCD and HIV/AIDS/STD Components of the Project, MOH has also established one technical group for regular coordination and guidance of project implementation activities, one project implementation office responsible for day-to-day project work, and one panel of experts to provide technical guidance and review annual plans under the respective parts of the project.

4.2 Most project activities are expected to be implemented in the provinces and the counties. Their management and coordination will be the responsibility of the provincial government, primarily through the provincial bureau of health (BOH), under the guidance of FLO/MOH, and with institutional arrangements similar to that of the Center. Each participating health bureau will maintain a project office, under the direction of the Project Director, to handle the logistics of implementation, including procurement and disbursement, preparation of workplans, progress monitoring and reporting, coordination with the expert and leading groups, and other tasks as needed. Following the pattern of higher levels, project implementation in the counties is the responsibility of the bureau of health, with guidance from provincial level and from the county leading group.

4.3 ***Financial management***. (See Annex 6 for detailed description). As for other Bank supported health projects, financial management will be the responsibility of the project units, the projects offices in MOH and BOH at each level, and the Ministry of Finance (MOF) and Finance Bureau (FB) at each level. There will be five Special Accounts for the project located in commercial banks acceptable to the Bank, and managed by MOF: one for Component A and Component C; and one for each province under Component B. The internal disbursement procedures will involve the Project Management Offices (PMOs)

and FBs at each level. Separate project accounts will be kept in the project units and offices at each level. Each project unit and project office will prepare regular financial reports to submit to the higher level project office. FLO will consolidate provincial reports and prepare the final financial report for the whole project. The project accounts and financial reports will be audited by the State Audit Administration or its local offices, in accordance with standard practice in China, which has been found acceptable to the Bank.

4.4 ***Procurement and disbursement***. (See Annex 6 for detailed description). FLO will oversee project procurement and will be responsible to ensure that the Bank Guidelines are followed. Details of the procurement arrangements are provided in Annex 6. The project will use the same arrangement as in other health projects for submission and validation of claims through the project office at each level, with review by the BOF at each level before being passed to the level above. Funds are transferred from level to level through commercial banks nominated by the BOF at each level.

4.5 ***Monitoring and supervision***. Two Project Implementation Plans (PIPs) have been prepared by and agreed with MOH and the provinces, which detail implementation arrangements. The project will be monitored through twice yearly progress reports containing essential data on the implementation of the project components and project management. Baseline data for the project monitoring indicators will be collected and reported by June 1999, and then included in the regular progress reports. This monitoring will be supplemented by supervision visits, conferences, and progress reviews led by the Central level. Achievement of development objectives will be assessed through a Mid-term Evaluation scheduled for 2002, and through a project completion review jointly produced by the Borrower and the Bank.

D: Project Rationale

1. Project alternatives considered and reasons for rejection:

1.1 MCH service improvement without program to improve access. The main rationale for this component was to help the Government accelerate the replication of the successful experience under the Health VI Project to additional areas with poorest population. There was a question whether access improvement measures should be left out of the project for the sake of simplicity. However, based on the results of the Functional Coordination Study and the Mid-term Evaluation carried out under the Health VI Project, the technical team felt that the objectives of reaching the poorest families would not be realized without assistance to improve their affordability. Therefore, it was felt that project preparation should proceed to include access improvement measures already tested under the Health VI Project.

1.2 HIV/AIDS/STDs prevention and control mainly through information, education and communication (IEC). There was a proposal to focus mainly on IEC activities on the grounds that HIV/AIDS/STDs were not yet very severe in China. This was rejected because, to avoid an impending crisis as evidenced by recent years' rates of spread, it was felt important to also implement all other aspects of a successful prevention and control program with full-scale multi-sectoral involvement.

1.3 HIV/AIDS/STDs prevention and control through Government agencies only. There was a proposal that prevention and control of these diseases should only be handled by government agencies. This was rejected on two grounds. First, private practitioners were already treating a very large number of STD patients in China, reportedly larger numbers than the government clinics in many areas. Many patients prefer to avoid Government clinics but would not mind visiting private practitioners. Including private practitioners in the program would help improve their skills and establish an appropriate surveillance program. Second, although not very significant in China at this time, non-government agencies have the potential to be even more effective in reaching high-risk groups.

2. Major related projects financed by the Bank and other development agencies (completed, ongoing and planned):

Sector Issue	Project	Latest Supervision (Form 590) Ratings	
		IP	DO
Bank-Financed			
Upgrading rural health services.	China: Rural Health and Medical Education Project (Cr. 1472-CHA)	Completed in December 1991.	
Improvement of China's capacity to design and implement health promotion programs, including HIV/AIDS and STDs. Prevent and control vaccine-preventable diseases through improved immunization.	China: Disease Prevention Project (Cr. 2794-CHA)	S	S
Improvement of quality and access of MCH care in China's poorest provinces.	China: Comprehensive Maternal and Child Health Project (Cr. 2655-CHA)	HS	HS
Basic health services as part of poverty alleviation.	China: Southwest Poverty Reduction Project (Ln. 3906-CHA/Cr. 2744-CHA)	S	HS
Safe blood transfusion services.	Vietnam: Safe Blood Project		
Comprehensive support for Government's efforts to control HIV/AIDS epidemic.	India: National AIDS Control Project (Cr. 2350-IND)	Completed in March 1999.	
Support to implement Government policy to reduce the incidence and effects of HIV/AIDS and STDs.	Indonesia: HIV/AIDS and STDs Prevention and Management Project (Ln. 3981-IND)	S	S
Other Development Agencies			
MCH care in poor rural areas	China: UNICEF supported Project to Improve MCH Services at the Grass Roots in 300 Counties.		
Rural health insurance reform	China: World Health Organization (WHO) supported Participative Study of Cooperative Medical System Schemes in 14 Counties.		
	China: Harvard/UNICEF supported Project on "Health Care Finance for China's Rural Poor "		

IP (Implementation Progress); DO (Development Objective).
Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory).

3. Lessons learned and reflected in the project design:

The main lessons learned from previous projects are summarized below.

3.1 The Comprehensive MCH Project (Cr. 2655-CHA; Health VI) has demonstrated that a carefully selected package to improve MCH services and increase access can result in dramatic reduction in maternal and child mortality and morbidity. In addition to improving training for health workers and providing basic equipment and additional management resources, under this project China piloted public funding of measures to improve financial access for the very poor, using an earmarked fund and a carefully designed benefits package, with defined standards for services eligible for reimbursement. This link between service quality and provider payment has proved to be an important tool for improving care and containing costs, and will be used in the new project.

3.2 The Disease Prevention Project (Cr. 2794-CHA; Health VII), which is currently implementing smaller programs for the prevention and control of HIV/AIDS/STDs, has provided a number of lessons toward the development of the HIV/AIDS/STDs Component in this project. Main models came from the design of the behavior risk surveillance, for the policies toward the private practitioners of STD care, outreach for sex workers, and the design of the community-based interventions.

3.3 Previous experience in the implementation of Bank supported health projects in China confirms the high level of commitment and ownership of the project by local governments and health bureaus, and the strong motivation for success. But the experience also highlights difficulties faced by implementing units in poor and remote counties, due to their own shortage of resources and to constraints imposed by Bank and government procedures applied through four or five administrative levels. These difficulties include: (a) late or inadequate mobilization of counterpart funds; (b) slow fund flow from higher levels (including Bank reimbursement) to county and township implementing units; and (c) some dissatisfaction with the costs, delays, and rigidity in obtaining equipment for low level health facilities through large procurement packages at national level. This project's implementation, management, and reporting arrangements will address these issues.

4. Indications of Borrower commitment and ownership:

4.1 The level of Borrower commitment is evident from the long-standing attention paid to the project by the core central agencies, the high level of involvement of participating provinces and counties in the steps of preparation, preparation by the Borrower of the PIPs, financial commitments made by the participating provinces before appraisal, and readiness to commence activities which are eligible for retroactive financing. In each project province, the project proposal was prepared based on individual counties' contributions and with their full participation. Each of the four workshops held between the Bank missions and the clients included representatives of planning, finance and health bureaus of each of the eight project provinces included under the two components, in which their participation was enthusiastic and supportive.

4.2 China's commitment to improve the population's basic and preventive health, especially maternal and child health, has always been well-known. The Government's resolve to confront the problems of HIV/AIDS was amply demonstrated during the international donors' conference, held in Beijing in November 1997, in which the Government openly addressed issues of concern, and requested international assistance.

5. Value added of Bank support in this project:

5.1 While the project is based on the Government's concept and policy priorities, the Bank's support has numerous benefits. Bank involvement affords three important contributions: (a) technical expertise and inputs; (b) policy backing and promotion; and (c) possibility of large investment and experience with large, integrated health projects. First, the Bank's worldwide experience helps bring the best international technical practices to China in both maternal and child health and in the prevention and control of HIV/AIDS/STDs. This aspect of the Bank relationship is valued most by China's health officials. Second, the Bank can be most effective in raising national awareness, commitment, and policy improvements that are required to implement early child development activities, and prevent and control HIV/AIDS/STDs. It is also essential to carefully handle China's sensitivity on HIV/AIDS/STDs issues with mutual trust, which the Bank is capable of doing because of the excellent current relationship. Third, China has implemented a large number of very small activities through other external agencies to control HIV/AIDS/STDs. However, the HIV/AIDS problem is complex and exponentially greater given the country's size, and China now needs a large-scale integrated program. In addition, China requires external technical assistance working in close coordination in a number areas. The proposed IBRD/IDA blend of lending can also help finance any equipment need, and the technical assistance can be financed from the project as well as from other sources that are expected to join in the Bank's efforts.

E: Summary Project Analysis (detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4 for a detailed analysis):

1.1 The economic analysis covers the following: (a) linkage to the CAS; (b) benefits and target population; (c) rationale for public sector investment in the project; (d) benefit-cost and cost-effectiveness analysis; and (e) poverty assessment. The project's three main components are estimated to have a potential internal rate of return (IRR) of a minimum of 39 percent for the benefits derived from the MHCD Component, at least 36 percent for the HIV/AIDS/STDs Component, and at least 5,000 percent for the blood transfusion services subcomponent. It is estimated that all three components are highly cost-effective relative to many other internationally investigated health sector investment options.

2. Financial (see Annex 5 for a detailed analysis):

2.1 The financial analysis covers the assessment of: (a) Affordability and Sustainability, and (b) Financial Management. Financial reporting arrangements are in Annex 6.

3. Technical:

3.1 Attention has been given to ensure that the technical design follows the established international best practices adapted for the specific needs of China's conditions. The MHCD Component follows the approach successfully applied in the ongoing Health VI Project, which was developed following the model under the programs supported by UNICEF, WHO and UNFPA. Special attention was paid to ensure that the case management protocols complied with the most appropriate practices recommended by WHO and UNICEF and adapted for China. The design of the HIV/AIDS/STDs Component has been based on the well-accepted successful international experience suitably adapted for the conditions prevailing in China. The experience gained under the pilot activities implemented in the Health VII Project provided important insights for the technical design. Finally, the blood transfusion services subcomponent has emphasized increasing voluntary collections of blood since current practice of heavy dependence on mandatory or paid collection was not considered appropriate. Similarly, the best international practices were considered and used to design the improvements in the handling of blood.

4. Institutional:

4.1 Borrowing Agencies. The Ministry of Finance and provincial bureaus of finance are well experienced in the use of Bank funds in investment projects, have taken an active role in project preparation, and have the competence to manage project special accounts and related responsibilities. Although the recent reorganization and staff reductions have strained MOF's coordination and overseeing capacity, MOF has assured continued adequate support. The Ministry of Health has over 15 years of successful experience in preparing and supervising the implementation of Bank supported projects. In 1997, the Bank's Quality Assurance Group cited the Comprehensive MCH Project (Cr. 2655-CHA) as an example of outstanding project supervision, which is, in part, a testament to this capability. All provinces participating in this project , as well as many project counties, have previous experience of implementing Bank supported health projects.

4.2 The main challenges or risks to successful and timely project implementation of the MHCD Component would be inadequate supervision of the project activities especially at the lower levels and in the most remote areas. Early implementation of the management training subcomponent at the county levels should reduce such risks. On the HIV/AIDS/STDs Component, the main constraint could be inadequate commitment and leadership from the high-level officials and insufficient inter-sectoral coordination. This concern should continue to receive high attention from the Bank and the Central Ministries.

5. Social:

5.1 A social assessment and stakeholder analysis have been integrated into both the preparation and design of both project components, MHCD and HIV/AIDS/STDs, with particular attention to the following social aspects.

5.2 First, for the MHCD Component, project activities have been targeted to the poorest counties in the project provinces, which were primarily selected based on their poverty index, using national and provincial poverty data. Women and children will be the major beneficiaries. For the HIV/AIDS/STDs Component, project activities have been targeted to the high-risk populations for these diseases in the project provinces, who would be the primary beneficiaries. Eventual benefits would also accrue to residents of other areas as the project experience spreads.

5.3 Second, a social inquiry of health issues was conducted, combining a baseline survey of local traits (demographic, social, cultural, and ethnic factors) with an assessment of income, health care status, and accessibility to health care facilities. Third, the participatory approach adopted for preparation of other Bank supported China health projects has been applied and strengthened, to effectively target the poor, appropriately design project activities, and effectively provide incentives for beneficiary performance. For the MHCD Component, a problem-oriented, strategic planning approach has been followed which aims at addressing the needs of villages and families in the project proposals. Under the HIV/AIDS/STDs Component, involvement has been maximized of social organizations, NGOs, and other relevant groups in project preparation and implementation. Stakeholder consultation and participation have been detailed in the project proposals and are summarized below. Fourth, the project includes a comprehensive sample survey of project beneficiaries (conducted at the start, mid-term, and close of the project) to systematically monitor project impact on local public health.

5.4 ***Minority nationalities in the project areas***. National minorities make up approximately six percent of China's total population, but the needs and concerns of minority nationalities have been identified as a specific topic of the social assessment and minorities have been identified as specific

stakeholders during project preparation. The proportion of minority nationalities is particularly high in the Xinjiang Uygur Autonomous Region. To the extent that members of these minority nationalities are represented among the very poor in the project counties, they will particularly benefit from project initiatives. Issues of concern to minorities will continue to be monitored and addressed through the participatory aspect of project implementation. The inclusion of "nationality" as a specific data variable in the project survey instruments for baseline, mid-term, and project completion assessment, will enable comprehensive and comparative analysis of issues for minority nationalities. In summary, the project has been designed to ensure that the minority nationalities in the project areas fully benefit from the project in accordance with O.D. 4.20.[3]

5.5 ***Resettlement***. No resettlement is anticipated in the project or as a consequence of the project. However, in case any new land acquisition is found necessary during project implementation, a set of resettlement guidelines was agreed during the negotiations, following recent practices.

6. Environmental assessment: Environmental Category [C].

The project is expected to have no adverse environmental impact. Attention will be given to issues of disposal of medical waste and use of energy saving technology.

6.1 ***Medical waste***. Medical waste hazards in small health facilities are not generally of high volume or toxicity. All facilities will collect and dispose of medical waste, including needles and syringes, separately from household waste, and in accordance with WHO's recommended policy and the national infection control procedures.

6.2 ***Energy saving***. Energy saving stoves are now available in China and will be introduced into the health facilities improved by the project. Solar water heaters will be introduced in those areas where the technology is known.

7. Participatory approach:

7.1 MOH and the project provinces have conducted consultation with a range of stakeholders at each administrative level, as well as exchange of views with other relevant groups. Apart from many health institutions and agencies, the sectors consulted included planning, finance, poverty alleviation, education, women's association, and international public health agencies such as UNAIDS. Targeted community consultation and participation have been intensively carried out in both project components. In the MHCD Component, selected families and villages have been mobilized in a process of consultation and feedback for project activity planning, and will participate in extensive education and training programs during project implementation. Under the HIV/AIDS/STDs Component, project design includes community intervention in project areas and high-risk groups. Moreover, all relevant sectors have been involved in intervention activities, including social organizations, NGOs, local governments, public security, schools, entertainment places, as well as AIDS prevention associations.

[3] For this project, the term "ethnic minorities" as used in O.D. 4.20 has the same meaning as the term "Minority Nationalities" referred to in the Chinese Constitution.

Stakeholder Group	Identification/Preparation	Implementation
Beneficiaries/community groups	IS/CON	IS/COL
Academic institutions and experts	CON/COL	CON/COL
Local government	COL	COL
Intermediary NGOs	CON/COL	COL
Other donors	IS/CON	IS/CON

IS: Information sharing; CON: Consultation; COL: Collaboration.

F: Sustainability and Risks

1. Sustainability:

1.1 Institutional sustainability. The main emphases of the project are on the methods and the best practices to accomplish those activities that are already a high priority for the Central as well as for the local levels in the project areas. To ensure lasting effects, the project focuses on policy development, institutional strengthening, technical assistance, and training, instead of hardware items. It is unlikely that the project will suffer from a lack of continued interest or the inability to maintain and further improve on the practices and technical know-how introduced and further strengthened by the project.

1.2 Financial Sustainability. The financing of implementation and maintenance of project activities will require significant increases in the budgetary resources from the provincial and county levels, but these requirements are small and quite affordable compared to present budgetary allocations, and the growth-trends of the concerned entities' budgets.

2. Critical risks (reflecting assumptions in the fourth column of Annex 1):

Risk	Risk Rating	Risk Minimization Measure
1. Failure to provide necessary counterpart financing to implement the project.	S	This has been a chronic risk in all health projects in China requiring continuous efforts to resolve, and it is expected to continue to a certain extent in this project. To minimize this risk, the project design takes this into account and allocates appropriate levels of counterpart funding.
2. Failure to provide adequate allocations to funds designed to improve poorest families' access to MCH services.	S	Adequate allocations for the poverty relief funds are a condition of the project and will be strictly monitored during implementation.
3. Failure to implement essential policy reform measures to enable effective control of HIV/AIDS and STDs.	M	Since the stated policy measures are critical, their institution and implementation will be strictly monitored.

Risk	Risk Rating	Risk Minimization Measure
4. Failure to timely develop and distribute clinical protocols and health-workers' training materials	M	This created a considerable problem under the Health VI Project but the past experience, and the already accomplished development of protocols/materials, should reduce this risk to an acceptable extent.
Overall Risk Rating:	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk).

3. Possible controversial aspects:

3.1 The blood supply may fall to critical levels during the transition phase between the current paid donors program and a truly voluntary unpaid donor program, due to a decline in paid donations and a slow rate of increase in voluntary donation. This risk is being managed by prioritizing development of the voluntary blood program and providing adequate resourcing. There will be a phasing of the introduction of the volunteer program and in these ways it is hoped to minimize the risk.

3.2 If early in this project more blood components are processed before the assurance that there is a safe blood supply and these components are transfused without strict clinical guidelines, then an increase in the transmission of all blood borne infections, including HIV/AIDS, is a likely outcome. This risk is being managed by strict regulations on the funding for this part of the project.

G: Main Loan Conditions

1. Board Conditions:

There are no Board conditions.

2. Effectiveness Conditions:

2.1 Project Implementation Agreements shall have been executed between the Borrower and at least two Part A provinces and two Part B provinces.

3. Other Conditions

A. Conditions Concerning the Whole Project

3.1 The Borrower shall maintain throughout the project period a Project Leading Group, a Project Coordination Group, and a Project Management Office for the whole project. In addition, for each of the MHCD and HIV/AIDS/STDs Parts of the project, the Borrower shall maintain a Panel of Technical Experts.

3.2 The Borrower shall prepare and furnish to the Bank semi-annual progress reports covering all aspects of the project in accordance with the performance monitoring formats and indicators acceptable to the Bank.

3.3 The Borrower shall, no later than December 31, 2002, carry out a Mid-term Evaluation of the Project, in accordance with the mutually agreed terms of reference and arrangements, and provide the report to the Bank within six months thereafter.

3.4 Signing of the Project Implementation Agreement with the Borrower will be an additional condition of disbursement for each province participating in the project.

B. Conditions Concerning Component A (MHCD) of the Project

3.5 Each project province shall ensure that all project counties implement and operate the medical financial assistance program, to subsidize at least five percent of the county's poorest populations, in a manner satisfactory to the Bank.

3.6 Each project province shall ensure that operational research on MCH service financing to the poorest families and MCH service utilization, is carried out in at least three of its project counties, in accordance with guidelines acceptable to the Bank.

3.7 Each project province shall submit its civil works plan to the Bank for review prior to commencing any civil works under Component A.

C. Conditions Concerning Component B (HIV/AIDS/STDs) of the Project

3.8 By October 31 of each year, each project province shall submit to the Borrower, for review and approval, a detailed annual plan and proposal for implementation of HIV/AIDS/STDs related interventions. The Borrower would appraise these plans and proposals through the Panel of Technical Experts and, by November 30 of each year, submit to the Bank a summary of these plans, proposals and comments for the Bank's review and no objection before these are implemented.

3.9 Each project province shall establish policies to: (a) provide training for the private practitioners treating STD and HIV patients; (b) license trained and qualified practitioners; (c) take strict measures to prevent the treatment of STDs by unlicensed and unqualified practitioners; and (d) treat HIV/AIDS/STD patients based on a policy of maintaining the confidentiality of the patients.

3.10 Each project province shall implement measures designed to ensure that: (a) no project fund shall be used for the expansion of blood fractionalization beyond the levels established by the baseline survey conducted by each province of blood center practices in blood collection, processing and use; and (b) the project-supported blood centers shall not sell blood or blood plasma for commercial fractionalization or other commercial uses.

3.11 Each project province shall: (a) tabulate a baseline status of the situation, in a manner agreed with the Bank, and carry out annual audits of blood center activities; and (b) maintain enforcement actions against the illegal collection of blood.

D. Conditions Concerning Component C of the Project

3.12 By November 30 of each year, the Borrower shall submit to the Bank, for review and no objection, an annual plan and programs to be implemented under the National AIDS Reference Laboratory included under Component C of the Project.

H: Readiness for Implementation

[X] The procurement documents for the first year's activities have been prepared.

[X] Project Implementation Plans have been prepared and reviewed for both main project components.

I: Compliance with Bank Policies

[X] This project complies with all applicable Bank policies.

Task Team Leader/Task Manager: Jagadish Upadhyay

Sector Manager: for Alan Ruby Maureen Law

Country Director: Yukon Huang

Annex 1
Project Design Summary

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
I. Sector-related CAS Goal: 1. Promote human development through meeting the basic health needs of the rural poor, with priority on maternal and child health care and priority diseases. 2. Implement programs for prevention and control of communicable and non-communicable diseases, including health and education.			**(Goal to Bank Mission)**
II. Project Development Objective: The project will assist the government to: (1) Reduce maternal and child mortality and morbidity and improve child survival and development in the poorest areas of China.	• Improved service quality and access to poor families. • Reduced maternal and child mortality and morbidity.	• Health information system and special surveys.	**(Project Development Objective to Sector-Related CAS Goal)** Assumption: • Improved Government commitment and allocations for preventive care. • Implementation of programs to improve affordability of the services. • Multi-sectoral cooperation.
(2) Prevent and control morbidity and mortality due to the human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), and sexually transmitted diseases (STDs), by implementing comprehensive and multi-sectoral public health programs at the provincial levels, and by building technical capacity at the Central level.	• HIV seroprevalence. • STD prevalence.	• Surveillance reports	• Funds will be allocated and used for this intended purpose. • Adequate management of central and provincial government funds. • Timely and adequate availability of counterpart funds.

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
(3) Reduce the transmission of blood borne infections by assuring a safe and adequate blood supply with improved transfusion practices.	• Increased voluntary blood contributions, quality assurance testing, and transfusion practices.	• Annual audit of blood management system	• Implementation of the agreed policy provisions.
III. Outputs[1]**:** Component A. Improved Maternal Health and Child Development (MHCD)		• Regular monitoring of inputs and other results by each of the project levels, i.e., counties, provinces and the Central level • Semi-annual progress reports • Bank missions • Mid-term Evaluation	**(Outputs to Project Development Objective)** Assumption: • Timely provision of agreed counterpart financing. • Establishment of an effective Central level project monitoring system. • Regular supervision by different Government levels and the Bank.
A1. Improved quality of basic maternal and child health (MCH) care services, including: (a) maternal care; (b) sick child management; and (c) well-child care and systematic newborn care, including nutrition and cognitive development.			
(a) Maternal care.	• # (%) pregnant women with three or more prenatal examinations. • # (%) hospital delivery rate of normal and high risk pregnancies, respectively. • # (%) postnatal visits for post-partum examination within 42 days of delivery.	• Progress reports	Assumption: • Improvement in supply will increase utilization. • Health education and access components will be effectively implemented.
(b) Sick child management.	• # (%) village doctors conducting health education on and care for sick child management in their communities.	• Progress reports	Assumption: Adequate management of supply and resupply of drugs, and other critical supplies and equipment, and that upgraded training has reached village doctor level.

[1] End-of-project statement of milestone reached through the implementation of each component (each output corresponds in number to its respective component).

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
(c) Well child care and systematic newborn care.	• # (%) mothers breastfeeding exclusively for four months after childbirth. • # nutritional surveillance studies of children. • # of Baby Friendly Hospitals.	• Progress reports	Assumption: Families' care seeking behavior is the same for preventive as it is for sick child visit.
A2. Improved family and community participation and education, including premarital counseling.	• # (%) township hospitals and village doctors/midwives with (and providing) health education materials and conducting health education sessions.	• Progress reports	Assumption: • Staff fluent in languages of population being served, and female staff available for health education and counseling of women in minority areas. • Health education materials and approaches have been translated and adopted.
A3. Improved management of MCH services.	• # (%) counties that have received management training. • # (%) counties with ongoing monitoring of baseline indicator.	• Progress reports	Assumption: Further experience in management training in China Health VI Project before initiation of this Project.
A4. Improved health workers training.	• # (%) MCH workers at village, township, central township, and county level, respectively, trained.	• Progress reports	Assumption: Timely translation, production and dissemination of training materials.
A5. Improved access to MCH care services, especially for the poor.	• % of the poor among the eligible poor population receiving support through "special funds" or an equivalent mechanism.	• Progress reports	Assumption: Establishment of an effective reimbursement mechanism and procedures for overcoming economic obstacles to care.
Component B. Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections			
B1. Improved and expanded policy environment, which provides leadership and is supportive of HIV/AIDS prevention and care: (a) Institutional building.	• # of sectors involved in leading and coordinating groups. • # of NGOs implementing interventions. • # of model interventions replicated.	• Project reports	Assumption: • Other government sectors will recognize the serious nature of the epidemic and want to be involved. • Provincial governments will provide funds to NGOs to implement interventions with high risk groups.

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
(b) Policy development.	• # of policies developed and disseminated.	• Project reports	Assumption: Central and provincial governments will develop policies providing guidance and regulation which facilitate appropriate interventions, reduce discrimination, and mitigate the impact of the epidemic on society.
B2. Improved HIV/AIDS/STDs interventions and support:			
(a) Increased knowledge about HIV/AIDS/STDs risks and prevention methods through expanded use of mass media.	• # (%) of urban and rural residents with knowledge of how HIV/AIDS is transmitted. • # (%) of urban and rural residents that can cite two ways to prevent transmission of HIV/STDs.	• Behavioral Surveillance Surveys (BSS)	Assumption: Government will recognize that information and knowledge alone are not sufficient for behavior change.
(b) High risk behaviors reduced among target groups through behavior change interventions.	• Increased condom use in last sexual encounter. • Increased condom sales. • Decreased needle sharing. • Increased # of people seeking appropriate STD treatment. • Increased access to affordable needles and syringes.	• BSS • Sales records	Assumption: • Government will permit use of public health approaches for prevention of high risk sexual behavior and needle sharing. • Police controlled detoxification and reeducation centers will allow introduction of harm reduction, health promotion, and condom promotion at these centers. • Provincial governments will make STD drugs available and affordable.
(c) Improved STD management with expanded access for comprehensive STD diagnostic and treatment services.	• # of STD practitioners providing correct and comprehensive approach to STD diagnosis and treatment. • # of practitioners using syndromic management approach. • # of private STD practitioners trained and licensed. • # of policies implemented regarding licensure of private practitioners.	• Monitoring reports • Observation studies • BSS • Project reports	Assumption: Provinces will recognize and accept the role of qualified private STD practitioners in STD management.

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
(d) Improved HIV/AIDS care and support.	• # of policies developed and implemented reducing discrimination. • # of model programs for care and support implemented.	• Project reports	Assumption: Government will recognize the importance and need for care and support policies and programs.
B3. Improved HIV/AIDS/STDs surveillance system:			
(a) Improved sentinel seroprevalence surveillance (SSS).	• # of sentinel sites consistently conducting surveillance surveys by province (annually). • # of blood samples tested for HIV by province (annually) in SSS. • # (%) of staff trained in SSS by province.	• SSS • Project reports	Assumption: Sentinel surveillance will be unlinked and anonymous.
(b) Improved AIDS/STD case reporting.	• # (%) of confirmed AIDS cases reported. • # (%) of STD cases (etiological and/or syndromic diagnosis reported). • # (%) staff trained in AIDS/STD reporting.	• Project reports	Assumption: AIDS and STD case reporting are confidential.
(c) Improved behavioral surveillance.	• # of annual BSS conducted by province. • # of people trained in BSS by province. • # of people in general population interviewed in BSS. • # of people practicing high risk behaviors interviewed in BSS. • # of health seeking behavior survey modules conducted.	• BSS	Assumption: Behavioral surveillance survey data will be unlinked and anonymous.
(d) Improved surveillance of STD etiology and antibiotic sensitivity.	• # of people trained. • # of regular surveillance programs in place.	• BSS • Project reports	Assumption: Results of surveillance (STD etiology and antibiotic sensitivity) data will be used to improve STD treatment guidelines.

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
B4. Improved management of blood transfusion services:			
(a) Improved blood supply for clinically essential transfusions.	• # (%) of blood units collected on site for emergency use. • # (%) of requests for blood that are not met in full.	• Annual reports from blood centers • Audit of supplied hospital blood banks	Assumption: Blood center management and resources are sufficient to increase donations.
(b) Increased proportion of blood units donated by voluntary, unpaid donors (VUPD).	• # (%) of blood units donated by VUPD.	• Annual report from blood centers	Assumption: • Adequate training, management, and resources at blood center level to expand voluntary donor participation. • Public and political support for voluntary donation. • Cessation of negative news reports about donors becoming infected. • Ability to secure confidentiality of donors found to be HIV positive.
(c) Improved quality management of blood system.	• External quality audits of blood centers: • # (%) of blood centers audited. • # (%) of blood centers submitting reports. • # (%) of blood center responses to audit report received. • # (%) of audits closed and responses acceptable.	• Annual reports from provincial clinical testing lab and provincial blood quality management committee	Assumption: Establishment of an effective external program by provincial blood quality management committee and provincial clinical testing lab.
(d) Reduced transmission risks of HIV, Hepatitis B, and Hepatitis C to:			
(i) Blood donors (as a result of blood collection procedures).	• # (%) of HIV, Hepatitis B, and/or Hepatitis C infections in blood/plasma donors attributed to donation process (detected by blood center or by surveillance or screening).	• Annual reports from blood centers	Assumption: Cessation of unregulated blood and plasma collections.

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
(ii) Blood recipients (as a result of transfusion).	• # of HIV, Hepatitis B and Hepatitis C cases reported due to transfusion. • # (%) of new HIV detection, by surveillance or screening, in which receiving transfusion is the most likely risk factor. • # (%) of transfusions of blood and blood components in compliance with the indications in rational clinical transfusion guidelines.	• Annual reports from blood centers • Annual reports from surveillance or screening (Epidemic Prevention Station) • Annual reports of clinical practice audits and on transfusion	Assumption: • Effective blood center management and external quality assurance program. • Adequate quality of test kits, maintenance of testing equipment, internal quality system, and service for confirmatory testing of positive screening tests on donor blood. • Data on outcome/impact depends on effective identification and analysis of risk factors in persons tested in surveillance or screening programs, and an effective mechanism for reporting this data to blood centers and EPS.
Component C: Project Coordination and Support			
C1. Provided the structure for effective project planning, budgeting, management and technical supervision at provincial and central levels.	• # provinces with fully staffed Project Management Office. • Average time for claim and disbursement cycle in each province.	• Progress reports	Assumption: This component will be adequately funded with full staff complement.
C2. Improved capacity of provinces to provide technical support to the project areas and disseminate the experience gained in project areas to other areas.	• # visits by provincial experts to project areas. • # (%) project areas complying with their annual training plans by component.	• Progress reports	
C3. Ensured that the central level can provide technical support to the provinces and use the experience of the project to contribute to policy development and national dissemination.	• # visits by central experts to the project provinces. • # of policies developed and disseminated.	• Progress reports	
C4. Improved capacity of the National AIDS Reference Laboratory (NARL) to provide training, technical support, and quality assurance to HIV testing and surveillance activities in the country.	• # (%) of provincial laboratory staff trained in HIV testing and management. • # (%) of quality assurance activities implemented. • # and types of technical support activities provided to provincial laboratories.	• Progress reports	Assumption: This component has adequate co-funding from the central government.

Narrative Summary		Project Inputs	Monitoring and Evaluation	Critical Assumptions
IV. Project Components:		**(Budget for Each Component)** **Base Cost (US$ million)**		**(Project Components to Project Outputs)**
A.	Improved Maternal Health and Child Development	42.87		Assumption: Timely and adequate counterpart funds.
A1.	***Improved Quality of Basic MCH Care Services.***	20.32	Progress reports	
A2.	***Improved Family and Community Participation and Education.***	5.32	Progress reports	
A3.	***Improved Management of MCH Services.***	5.49	Progress reports	Risk: Implementation delayed by slow fund availability.
A4.	***Improved Health Workers' Training.***	9.56	Progress reports	
A5.	***Improved Access to MCH Care Services.***	2.19	Progress reports	
B.	Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections	27.17		
B1.	***Improved and Expanded Policy Environment.***	3.49	Progress reports	
B2.	***Improved HIV/AIDS/STDs Interventions and Support.***	11.00	Progress reports	
B3.	***Improved HIV/AIDS/STDs Surveillance System.***	5.35	Progress reports	
B4.	***Improved Management of Blood Transfusion Services.***	7.32	Progress reports	
C.	Project Coordination and Support	6.00		
C1	***Project Coordination and Support for Part A of the Project***	0.72	Progress reports	
C2.	***Project Coordination and Support for Part B of the Project***	5.28	Progress reports	

Note: Differences due to rounding.

Annex 2
Project Description

The project has two main components, which are described in this annex. Component A, Improved Maternal Health and Child Development, or MHCD Component, will be implemented in a total of 113 counties in five provinces, covering 51 million people: Guizhou, Hainan, Hunan, Jilin, and Xinjiang. Component B, Improved Prevention and Control of Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome and Sexually Transmitted Diseases and Other Blood Borne Infections, or HIV/AIDS/STDs Component, includes 31 prefectures, covering 94 million people in four provinces: Fujian, Guangxi, Shanxi, and Xinjiang. Will be implemented in 31 out of

INTRODUCTION

1. The objectives of the project are to assist the Government to reduce maternal and child mortality and morbidity and improve child survival and development in the poorest areas of China, and to prevent and control the spread of HIV/AIDS/STDs and other blood borne infections in selected counties by implementing comprehensive and multi-sectoral public health programs at the provincial levels, and by building technical capacity at the Central level. This would be achieved through:

- improved quality of basic MHCD care services.
- improved family and community participation and education.
- improved management of MCH services.
- improved health workers' training.
- improved access to MCH care services, especially for the poor.
- improved and expanded HIV/AIDS/STDs policies.
- improved HIV/AIDS/STDs interventions and support.
- effective surveillance of HIV/AIDS/STDs.
- improved collection, handling, and use of safe blood for essential medical care.

2. The project design incorporates the following features:

- MCH project activities in each county will involve families and communities as equal partners with health workers to use participatory methods to gather information for the development of health education materials and strategies. They will be targeted at removing the resource, knowledge, and cultural barriers to appropriate use of services by poor women and children, communities, groups, and individual at greatest risk.
- MCH project training activities will introduce the approach of systematic management of sick children, and the risk approach in maternal and neonatal care. Management training will introduce health workers to methods for problem solving, supervision, and quality of care assessment using the management information system (MIS).
- HIV/AIDS/STDs project activities in each province will be implemented through the private, public, and NGO sectors.
- HIV/AIDS/STDs project activities will be targeted at reducing high risk behaviors and educating the general public.
- each participating province or county has the flexibility to select HIV/AIDS/STDs interventions based on the local epidemic and priorities.

PROJECT COMPONENTS

3. Project activities are grouped into three components. Components A and B will be implemented in the participating provinces and Component C contains the activities to be implemented by the central level. Component A will be implemented in the provinces of Guizhou, Hainan, Hunan, Jilin, and Xinjiang; and Component B in Fujian, Guangxi, Shanxi, and Xinjiang. Appendix 2-1 to this Annex contains a list of project counties for Component A and project prefectures for Component B. Detailed descriptions of each component are available in the project files, and in the Project Implementation Plans (PIPs).

4. **Component A. Improved Maternal Health and Child Development** (total base cost US$42.87 million) comprises five subcomponents, which will reduce maternal and child mortality and morbidity and improve child survival and development in the poorest areas of China.

A1. Improved Quality of Basic Maternal Health and Child Development Care Services

5. The purpose of this subcomponent is to improve the quality and effectiveness of a basic package of mother and child health care services at the village, township, and county level. Main activities would include: (a) systematic prenatal care, appropriate obstetric care, and labor and delivery care (including hospital delivery and postnatal care); (b) early detection, management, and timely referral of high-risk pregnancies, intra- and post-partum complications such as hemorrhage, and other emergencies; (c) integrated sick child care for priority childhood illnesses (febrile illnesses, pneumonia, diarrhea), malnutrition, and newborn resuscitation and care; and (d) improved well-child and systematic newborn care, including growth monitoring and promotion of breastfeeding through "Baby Friendly" health facilities.

6. The project will fund: development and dissemination of clinical protocols and procedures, equipment, the incremental costs of program support for clinical supervision and visiting services to lower levels, and limited rehabilitation of health facilities.

A2. Improved Family and Community Participation and Education

7. The purpose of this subcomponent is to increase family and community participation and improve health education by: (a) promoting pre-marital counseling services, involvement in self-care, and timely use of the appropriate health services; (b) adapting health educational materials and such tools as home-based maternal and child records, to be understandable and action oriented for families; (c) addressing such priorities as the prevention and treatment of anemia, Vitamin A deficiency, rickets, and worm infestation (in specific areas based on epidemiological evidence); (d) promoting and monitoring nutrition through counseling on breastfeeding, weaning and supplemental foods, and nutrition surveillance; (e) promoting parenting skills to foster children's psychosocial development through the use of simple culturally appropriate health education materials and methods covering the needs of children of different ages; and (f) designing and producing child development and maternal health information, education, and communication (IEC) materials using methods that facilitate understanding by the target audience.

8. The fund will finance: (a) revision, adaptation, and production of health education and mass communication materials based on previous projects and materials; (b) translation of materials and guidelines into minority languages; (c) operational costs for training in participatory methods and in one-to-one counseling techniques, and for community-based focus group surveys; (d) essential audiovisual

equipment for community and clinic based health education; (e) costs of adaptation and printing of home-based maternal and child records for county level pilot projects; (f) program costs of regional technical advisory teams; and (g) training of trainers.

A3. Improved Management of MCH Services

9. The purpose of this subcomponent is to: (a) improve the mechanisms and skills for better planning and coordination of MCH services; (b) improve the quantity and quality of supervisory support between levels; and (c) improve the function and use of the existing management information and surveillance systems for MCH. These objectives will be accomplished by strengthening management training in the principles of management and the knowledge and understanding of the different tools and methods for management problem solving and quality of care assessment, in large part through a strengthened management information system.

10. The project will finance: (a) further adaptation and development of existing management training materials for provincial and county levels; (b) costs of printing management training materials and management forms; (c) development, evaluation, printing, and distribution of guidelines and manuals for supervision; (d) expert group review, including meetings of management procedures and the management information system; (e) training of trainers; (f) county management training; (g) an expert group to examine the results of the Health VI Project functional coordination study and the coordination implications for clinical care and program management of the restructuring of MCH and primary health care; (h) costs of township and village doctor/midwife supervision; (i) software and training at provincial level in geographic information systems; (j) hardware and supporting software for computerizing the MIS; and (k) training and project support for operational research.

A4. Improved Health Workers' Training

11. This subcomponent will improve the technical and clinical competence of all staff involved in MCH care by establishing a system of regular refresher training that can be sustained and replicated by the project provinces. Training activities are divided into short term (about one week) and longer-term (three to six months) courses and focus on improving health service skills, especially MCH skills and various aspects of management. Comprehensive packages of teaching, learning, reference, and assessment materials would be developed, building on the experience of earlier programs in China, notably the World Bank's Comprehensive MCH Project (Cr. 2655-CHA), and the China "300 counties Project" supported by UNICEF, WHO, and UNFPA.

12. The project will finance: (a) printing of existing materials; (b) revision or new development and production of training materials; (c) translation of the materials to various ethnic languages; (d) operational costs of the training courses; (e) limited rehabilitation and expansion of the county-level training facilities and training equipment; and (f) training of trainers.

A5. Improved Access to MCH Care Services

13. This subcomponent will provide a program of poverty relief funds for the very poor. The purpose of these funds is to develop and implement a program of medical financial assistance in each project county, to cover part of the costs of providing to the poorest families selected health services that reduce the risks of maternal and child mortality, serious morbidity from the complications of pregnancy and delivery, and the common causes of child mortality and disability.

14. Activities include identifying eligible populations, a basic package of services to be covered, the range of subsidies and copayment, sources of funds, operational standards, reimbursement, accounting, and audit procedures. The eligible services would include: (a) a MCH package of prenatal, hospital delivery, post-natal visits, childhood immunizations and Tetanus Toxoid for pregnant women, and outpatient care for common illnesses of under-five year olds; and (b) about 70 percent of the costs of services and drugs provided at the village level, 65 percent of outpatient and inpatient costs at the township level, and 60 percent of the costs at the county level.

15. The project will fund the establishment of poverty relief funds program management, monitoring, and coordination at township and county levels, including staff training and supervision. It will also pay for the service subsidies provided by the poverty relief funds.

Component B. Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections (total base cost US$27.17 million) comprises four subcomponents, which will prevent and control these diseases by implementing comprehensive and multi-sectoral public health programs at the provincial levels, and by building technical capacity at the Central level.

B1. Improved and Expanded Policy Environment

16. The purpose of this subcomponent is to provide leadership for a multi-sectoral approach to prevent and control the spread of HIV/AIDS/STDs. This will be achieved through institutional building and development of specific policies at the central and provincial levels. This subcomponent will: (a) raise awareness and commitment at all levels; (b) strengthen multi-sectoral collaboration; (c) build capacity of public and private sectors and NGOs; (d) integrate HIV/AIDS/STDs and other blood borne infections programs into other health services; and (e) support policies on syndromic management of STDs, blood safety, condom social marketing, floating (or migrant) populations, and discrimination against AIDS patients.

17. The project will finance training, meetings, study tours, quality assurance, supervision, and an information support system.

B2. Improved HIV/AIDS/STDs Interventions and Support

18. This subcomponent is the core of the HIV/AIDS/STDs Component. The objective is to implement innovative and cost-effective programs in public and community settings that are designed to prevent and control HIV/AIDS/STDs, and create a supportive environment for people with HIV/AIDS/STDs. The interventions will be targeted toward changing the behavior of those at highest risk for HIV and will be supported by information and education of the general public to increase their knowledge about risks. The subcomponent will also focus on improved STDs management, condom social marketing, and patient care and support.

19. The project will finance mass media campaigns, training, equipment, materials, study tours, behavior change interventions, and development and expansion of syndromic management for STDs.

B3. Improved HIV/AIDS/STDs Surveillance System

20. This subcomponent will develop and expand a surveillance system to monitor HIV/AIDS/STDs epidemic and behavioral trends, influence policy, inform project design, and measure the impact of the interventions. This subcomponent will support: (a) sentinel seroprevalence surveys; (b) HIV and STDs case reporting; (c) behavioral surveillance surveys; and (d) improved surveillance of STDs etiology and antibiotic sensitivity.

21. The project will finance HIV and STD testing, laboratory equipment, sero and behavioral surveys, training, and study tours.

B4. Improved Management of Blood Transfusion Services

22. An efficient and effective blood transfusion services system is requisite to provide a safe and sustainable supply of blood for clinically essential transfusions, thereby reducing the risk of transmission of blood borne infections, and reducing maternal morbidity and mortality. This will be achieved by the following main activities: (a) establishing a program of voluntary unpaid blood donation of sufficient size to meet clinical needs as defined by guidelines on clinical transfusion practice; (b) providing sufficient staff and material resources to support the voluntary blood donation program; (c) implementing an effective program of quality assurance for blood testing, processing, storage and delivery; (d) developing, disseminating, and promoting the use of clinical guidelines for good transfusion practice by clinicians to avoid inappropriate transfusion of blood and blood components; and (e) providing the necessary training of blood service and clinical staff.

23. In the project provinces, the project will fund essential additional staff, training, medical supplies (drug reagents), and material resources to support the existing activities to expand the voluntary donation program and develop a quality assured blood supply system. Vehicles are essential to the community based donation program, and essential, specialized vehicles will be provided to meet program objectives. Similarly, appropriate vehicles in sufficient numbers are essential if blood is to be supplied to meet clinical needs in hospitals served by the provincial blood centers and regional blood stations. In accordance with these objectives and priorities, the project will fund equipment items and vehicles for which there is a demonstrated need. The project will not fund equipment for further expansion of the separation of blood into its components (red cells, plasma, and platelets).

Component C. Project Coordination and Support (total base cost US$6.00 million).

24. Through this component the national level agencies will: (a) develop and implement policies necessary to achieve the project objectives; (b) provide necessary coordination and support to the provinces to plan, supervise, monitor and report on project progress; (c) facilitate and provide technical assistance to the provinces; (d) implement research and other activities best suited for implementation at the Central level, including operational research on MCH service financing for the poorest families and MCH service utilization; and (e) replicate successful practices to non-project areas. The project will support the establishment of a National AIDS Reference Laboratory (NARL) to offer technical support to HIV testing and surveillance activities and provide guidance in HIV testing and management, monitor and supervise HIV testing laboratories, and evaluate HIV diagnostic tests in use in the country. The NARL will also build the capacity to monitor HIV viral types and variants in the country.

25. These national level activities will be carried out under the overall coordination of the Project Leading Group assisted by the project units and technical units to be established in the Ministry of Health in a manner acceptable to the Bank. Detailed outlines for the activities of Component C are provided in the PIPs for the project and are also available in the project files. The PIPs also cover all activities of project management by the Foreign Loan Office of MOH and the project implementing units in the provincial health bureaus.

Appendix 2-1

Project Objectives and Performance Indicators [1]

Project Objectives	Key Performance Indicators
The project will assist the government to:	
(1) Reduce maternal and child mortality and morbidity and improve child survival and development in the poorest areas of China.	• Improved service quality and access to poor families. • Reduced maternal and child mortality and morbidity.
(2) Prevent and control morbidity and mortality due to the human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS), and sexually transmitted diseases (STDs) by implementing comprehensive programs at the provincial levels, and by building technical capacity at the Central level.	• HIV seroprevalence. • STD prevalence.
(3) Reduce the transmission of blood borne infections by assuring a safe and adequate blood supply with improved transfusion practices.	• Increased voluntary blood contributions, quality assurance testing, and transfusion practices.

[1] Definitions of the indicators are included in the PIPs, and targets will be noted in the annual action plans.

Appendix 2-1

Project Counties for Component A

Province	Counties		
Guizhou Province	Puan	Tianzhu	Pingba
	Xingren	Jinping	Xishui
	Anlong	Longli	Fenggang
	Weining	Dushan	Shuicheng
	Qianxi	Libo	Xifeng
	Hezhang	Yinjiang	Xiuwen
	Bijie	Sinan	
	Huangping	Shiqian	
Hainan Province	Baoting	Baisha	Sanya City
	Qiongzhong	Ding'an	Wanning City
	Tongshi City	Lingao	Chengmai
	Changjiang	Danzhou City	Qionghai City
Hunan Province	Longshan	Wugang City	You
	Jishou City	Shaodong	Chaling
	Yuanjiang City	Chengbu	Leiyang City
	Nan	Xupu	Changning
	Taojiang	Mayang	Hanshou
	Cili	Tongdao	Dingcheng
	Anren	Zhijiang	Miluo City
	Jiahe	Xiangtan	Yueyang
	Yongxing	Qiyang	Linxiang City
	Suxian	Jiangyong	Huarong
	Ningxiang	Ningyuan	Lianyuan City
	Wangcheng	Dongan	Lengshuijiang City
Jilin Province	Nong An	Shuangliao	Zhenlai
	Dehui	Huinan	Daan
	Yushu	Changbai	Wangqing
	Shuangyang	Jingyu	Dunhua
	Huadian	Jiangyuan	Huichun
	Gongzhuling	Fuyu	
	Lishu	Tongyu	
Xinjiang Province	Yutian	Baicheng	Tuoli
	Pishan	Xinhe	Emin
	Hetian	Luntai	Aletai City
	Shufu	Hejing	Buerjin
	Yingjisha	Tuokexun	Jinghe
	Yuepuhu	Nileke	Mulei
	Maigaiti	Gongliu	Manasi
	Aketao	Tacheng City	Hutubi

Project Prefectures for Component B

Province	Prefectures	
Fujian Province	Quanzhou	Longyan
	Zhangzhou	Ningde
Guangxi Province	Nanning City	Fangchenggang
	Nanning	Wuzhou
	Liuzhou	Beihai
	Guilin	Yulin
	Guigang	Baise
Shanxi Province	Taiyuan	Jinzhong
	Datong	Changzhi
	Jincheng	Linfen
	Yangquan	Yuncheng
Xinjiang Province	Urumqi	Yili
	Yilizhou	Hami
	Bazhou	Tacheng
	Changjizhou	Akesu
	Shihezi	

Annex 3
Estimated Project Costs

Estimated Project Costs
By Project Component

Project Component	Total (US$ Million)
A. Improved Maternal Health and Child Development (MHCD)	
A1. Improved Quality of Basic MHCD Care Services	20.32
A2. Improved Family and Community Participation and Education	5.32
A3. Improved Management of MCH Services	5.49
A4. Improved Health Workers' Training	9.56
A5. Improved Access to MCH Care Services	2.19
Subtotal Component A	**42.87**
B. Improved Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections	
B1. Improved and Expanded Policy Environment	3.49
B2. Improved HIV/AIDS/STDs Interventions and Support	11.00
B3. Improved HIV/AIDS/STDs Surveillance System	5.35
B4. Improved Management of Blood Transfusion Services	7.32
Subtotal Component B	**27.17**
C. Project Coordination and Support	
C1. Project Coordination and Support for Part A of the Project	0.72
C2. Project Coordination and Support for Part B of the Project	5.28
Subtotal Component C	**6.00**
Total Baseline Cost	**76.05**
Physical Contingencies	2.95
Price Contingencies	14.91
Total Project Cost	**93.91**

Note: Differences due to rounding.

Annex 4
Economic Analysis

Introduction

The economic analysis covers the following: (a) linkage to the CAS; (b) benefits and target population; (c) rationale for public sector investment in the project's three components; (d) alternatives, benefit-cost, and cost-effectiveness analysis of each component; and (e) poverty assessment. The project's three components are estimated to have a potential Internal Rate of Return (IRR) of a minimum of 39 percent for the benefits derived from the MHCD Component, at least 36 percent for the HIV/AIDS/STDs Component, and at least 5,000 percent for the blood transfusion services subcomponent. It is estimated that all three sub/components are highly cost-effective relative to many other internationally investigated health sector investment options, with the MHCD Component saving a DALY for about RMB 20. Corresponding estimates of the cost per DALY saved shows the HIV/AIDS/STDs Component saving a DALY between RMB 164 and RMB 139 and the blood transfusion services subcomponent spending RMB 181 per DALY saved. A more in-depth statement of these and other findings are in the project's files.

1. Linkage with the Country Assistance Strategy (CAS)

1.1 The project is fully consistent with the goals and priorities of the CAS, both to improve the human capital of the country by improving health status, and by reducing the negative effects of poverty by improving maternal and child health status. The MHCD Component replicates the China Health VI Project in 113 additional low-income counties in five rural and low-income provinces, covering nearly 51 million persons. In the most recent CAS (1997) and the 1998 CAS progress report, concern focussed on using scarce public resources to improve human development in a cost-effective manner and target public funds to address the welfare of the most impoverished areas of the country. This project will extend the success of the Health VI Project, which has reduced the MMR and IMR in most of the poorest counties in the nine project provinces by the Mid-term Evaluation by about 50 percent in both cases.

1.2 The control of the emerging HIV epidemic is also a high priority outlined in the CAS and CAS progress report, and can contribute to the further high rate of economic growth by protecting the further spread of the epidemic into the mainstream population. The project will test intervention strategies which have worked in many other international settings in four provinces, which, until now, have experienced different epidemiological patterns of spread of HIV and STDs. This experience will then be used to develop a future national intervention program. Since the epidemic also tends to concentrate in the poorest groups, the project will also contribute to poverty reduction over time.

1.3 Finally, the project will invest funds to improve the management of the blood banking system in China. In part, this investment comprises one well tested method of preventing the spread of HIV and other STDs through the blood banking system. In addition, it has many other potential benefits as well, most notably the first major action to move toward voluntary collection of blood, improvement in the processing and use of the blood in medicine.

2. Benefits and Target Population

2.1 Through the MHCD Component, the project will most directly benefit about one million mothers and their infants born each year in 113 poorest counties located in five relatively poor provinces in China

(Guizhou, Hainan, Hunan, Jilin, and Xinjiang), with higher quality and greater access to health services, which have been tested and well known in China to contribute to reductions in maternal and infant mortality. The young (under five years of age) brothers and sisters of these children will also benefit by reductions in the under five mortality rate (U5MR) and from improved nutrition education, parenting, and child development skills so the psychosocial development of young children is enhanced. The findings of the recently completed Mid-term Evaluation of China's Health VI Project (MCH focussed) demonstrated the feasibility of these achievements even in the poor counties of eight poor provinces.

2.2 In addition to these health status benefits, the households, which directly realize the mortality reductions, will also benefit in the following ways: (a) enhancing economic productivity of the families by saving the lives of adult women; (b) ensuring the continuation of non-market produced household goods and services; and (c) reducing medical care costs for MCH related services (especially hospital delivery care) for the most impoverished families in these poor counties via the locally administered poverty relief funds.

2.3 The HIV/AIDS/STDs Component will directly benefit those persons who are at greatest risk of contracting a STD or HIV (those involved in drug use, commercial sex, or are commercial blood donors). In the four project provinces (Fujian, Guangxi, Shanxi, and Xinjiang), these high risk groups comprise about two million persons. In these four provinces those who stand most to benefit are those already afflicted with HIV (there are nearly 2,000 reported cases and perhaps as many as 20 thousand, estimated via WHO procedures) and STDs (reported cumulative cases are 218,089 since 1993). They will directly benefit by the provision of high quality treatment for those STDs or by controlling secondary infections such as TB.

2.4 As this project matures and models for addressing the STD problem in China are tested, the entire population of the country could benefit from the initiated activities. This is especially true for those measures taken to reduce the further spread of STDs as they also reduce the probability of spreading HIV. The benefits defined in paragraph 2.2 above are likely to yield considerable benefits to those households and families which do not become afflicted with or can be successfully treated for a STI, especially HIV/AIDS. The international research findings documented in the recently published World Bank book, Confronting AIDS: Public Priorities in a Global Epidemic, 1998, demonstrate how considerable these benefits can be.

2.5 The primary beneficiaries of improved management of blood transfusion services are all of those persons who require blood products as a part of their health care treatment (in 1993 nearly 50 million persons were hospitalized for care). The risk of blood borne infection transmission of hepatitis would be significantly reduced. In addition, since HIV/AIDS can be transmitted via untested blood and since the epidemic in Shanxi Province (and to a lessor extent Xinjiang Province) is most directly linked to tainted blood supplies, direct project beneficiaries include those who reside in those provinces.

2.6 Finally, there are seven main institutional benefits of the project. First, the MHCD Component will help increase public resource allocation for basic preventative health services. Second, it will introduce an improved training program for health care workers. Third, improved management practices will be introduced into the public delivery of preventive health services. Fourth, the HIV/AIDS/STDs Component will strengthen the capacity of the central and provincial governments to plan and implement effective programs to prevent and control these serious diseases. Fifth, the blood transfusion services subcomponent will develop effective national policies to improve the quality of blood products used in the country. Sixth, it will also strengthen the capacity of provincial and local personnel in rationalizing the use

of blood products in health service provision. Finally, the national HIV/AIDS laboratory will develop improved testing methods and procedures to improve the accuracy of HIV tests and train provincial and local personnel in how to implement them.

3. Rationale for Public Sector Investment in the Project

3.1 The two primary reasons for public intervention into the Chinese health sector to enhance MCH services and mitigate the HIV/AIDS/STDs epidemics are the existence of: (a) market failures; and (b) negative externalities. The primary market failure is a lack of consumer knowledge regarding the importance and potential availability of interventions which can improve MCH status, and reduce the practice of risky sexual practices and transmission of blood borne infections. The primary negative externality is related to the spread of infectious STDs such as HIV.

3.2 In addition, there are equity (merit want) reasons for supporting public intervention where the health problems are concentrated in poor income areas, as is the case with high rates of maternal and infant death. Further, since the stigma of the label of "HIV positive" can lead to adverse human rights and other welfare consequences for those afflicted, there is an equity rationale for public intervention, irrespective of how an individual may have become infected with HIV.

3.3 Finally, as the blood transfusion services and HIV national laboratory subcomponents lead to an enhancement of the quality of all health care service delivery through a process of applied research in each area, public investment is justified on the basis of the public good attributes of research. For the blood transfusion services subcomponent, a further justification is based on the reduction in the negative externalities transmitted via poor quality blood. This justification has been the primary rationale used in other Bank funded projects investing in improvements in the blood supply.

4. Benefit-Cost and Cost-Effectiveness Analysis of the Project Components

4.1 (A full explanation of all calculations along with Summary Tables is presented in a detailed project document.) In terms of the alternative intervention options considered for each project component, the MHCD Component follows the highly successful Health VI (MCH) Project being implemented in the poor rural counties of eight provinces in China. It has attained highly successful results and implementation has been performing well. The HIV/AIDS/STDs Component has been designed using high risk group interventions which have been proven successful in many other international settings, and have been tested in selective sites in China, for example, peer counseling and condom promotion among commercial sex workers and their major clientele, and long distance truckers. The blood transfusion services subcomponent is designed to address the dual problems of blood contamination and paid donor contributions which is said to have a higher prevalence of STDs including HIV. A strategy is emerging for seeking more volunteer donors.

4.2 MHCD Component. A partial Benefit Cost Analysis (BCA) has been performed on this proposed component on an ex-ante basis. A number of assumptions were made to conduct the analysis, including,

(a) two benefits were included in this assessment: (i) the annual productivity loss attributable to women who lost their lives during child birth, with the productivity loss estimated to be equal to the 1997 per capita annual income for the poor counties included in the project; and (ii) the present value of children who needlessly die during the first year of life;
(b) the only assessed benefit was the annual productivity loss attributable to women who lost their

lives during child birth, with the productivity loss estimated to be equal to the 1997 per capita annual income for poor counties included in the project;[1]/

(c) per capita annual income is not assumed to grow during the project period;

(d) project costs are assumed to be incurred according to the disbursement schedule in the PIP, Annex 12, for the first five year period, and subsequent to that recurrent costs of the MHCD Component are assumed to equal RMB 25 million per year, based on the cost tables for the project from which this figure was derived;

(e) the flow of benefits (in this case, maternal lives saved) is equal to the difference between the expected number of maternal deaths resulting from the present MMR of 169 per one hundred thousand persons and the revised number of maternal deaths based on reductions achievable via the project; and

(f) achievable reductions in the MMR are based on the findings from the Mid-term Evaluation of the Health VI Project, July 1998 draft), with a continuing trend of MMR reductions throughout the ten year period.

4.3 The findings show that the IRR for these two project benefits, a minimum productivity benefit derived from the lives of the mothers saved and 4.2 (b) above is about 39 percent. With other benefits included, such as those derived from reducing IMR and U5MR to levels equivalent throughout China, along with the many other benefits (see section 3 above), the project's IRR would be much higher. This is true since the burden of disease lost from premature death of children is at least four times as large as that lost from maternal death. Since the benefit stream calculated uses the average rural per capita income in the poor counties where the project will be implemented, without any growth over ten years, that further reduces the estimated flow of the expected benefits from this one benefit alone. Thus, it represents a minimum estimate. Further, if the benefit stream were assessed over a longer time period than ten years, then the net present value for this project component would be greater, even accounting for the additional recurrent costs incurred.

4.4 In conducting the cost-effectiveness analysis (CEA) for the MHCD Component, it was necessary to make a number of assumptions. First, it assumes that the cost flow of the component is as presented in Annex 10 of the PIP, and that subsequent to the project, recurrent cost flows to continue the interventions will be on the order of RMB 25 million per year in the project supported counties. [2]/ Second, it is assumed that the trend in the reduction of the IMR, U5MR, and MMR achieved during the first three years of the Health VI Project can also occur in the poor counties assisted by this project. It is also assumed that the trend will continue throughout a ten year period. Third, it is assumed that the DALYs saved by the reductions in the IMR, U5MR and MMR will occur according to a similar trend.

4.5 The findings of the analysis suggest that the ten year cost per DALY saved is about RMB 20.4 (US$2.46 at current foreign exchange rates). Over the first five project years during significant investment costs, the cost per DALY saved is higher, around RMB 40.0 (US$4.83). For both the five and ten year periods, the marginal cost per DALY saved is less than the average, around RMB 15 and RMB 7 respectively.

---

[1] Estimated from data contained in PIP/MCH, p. 10, Table 2.1, MOH, August 18, 1998.

[2] The figure of RMB 25 million per year is equivalent to about RMB 0.45 per capita in the poorest counties of the project.

4.6 These figures suggest that the proposed investment in MCH improvement in poor rural areas of China today is highly cost-effective relative to many other possible investments, though not the most cost-effective. In China during the mid-1990s, when immunization coverage was lower, for one RMB, as many as 1,386 DALYs could be saved from increasing immunization coverage of BCG, 1,204 DALYs for extending Hepatitis B coverage, 182 DALYs for expanding neo-natal tetanus, and 35 DALYs for increasing measles coverage. Today, however, as immunization coverage for these diseases have become very high, the DALYs saved from additional immunization efforts has dropped concomitantly. Thus, the present cost-effectiveness ratio for immunization programs in China would be much higher.

4.7 The HIV/AIDS/STDs Component. An ex-ante BCA of this component has been conducted, in part by employing a number of assumptions about the following issues, including the:

(a) course of the epidemic in the four project provinces over the next decade with and without the epidemic;
(b) benefits and their corresponding value in monetary terms;
(c) expected recurrent cost of the project interventions after the period of initial project investments; and
(d) period of evaluation is ten years.

4.8 To address the first issue, the analysis used available information from UNAIDS, MOH, and provincial and MOH draft PIPs regarding the numbers of cases of HIV and AIDS nationally and provincially. This information was subject to a set of internal checks for accuracy and then projections were made, first nationally regarding the prevalence and incidence of HIV and AIDS cases. It was assumed that an HIV case would turn into an AIDS case in eight years, and then the AIDS case would die in one year, based on information from MOH and other knowledgeable individuals. Then an estimate was made of the course of the epidemic in the four project provinces, with the national figures and prevalence rates serving as guidelines.

4.9 It was assumed that the interventions might alter the course of the epidemic by effective implementation to the extent that only 1.5 million Chinese might become HIV positive by 2010, rather than 10 million estimated from early projections made by WHO. They were then reviewed for their consistency, and a median and low range estimate of the future course of the epidemic, with and without the intervention, was then developed and used to estimate the numbers of cases of HIV and AIDS averted by the project intervention. The lowest estimates were used in the final assessment of the benefits.

4.10 It was also required to assess the direct and indirect benefits of the cases of disease averted. Direct benefits included the medical care for HIV and AIDS cases averted due to the fewer cases of the illness in each year over a ten year assessment period. A similar benefit would also accrue for the treatment of other STDs such as syphilis and gonorrhea, but nothing could be gleaned about case treatment costs. The indirect benefits of foregone earnings of cases of HIV and AIDS averted were estimated, employing assumptions about the following issues. First, what would be average earnings streams in the project provinces (ten percent of Chinese average per capita income). Second, time horizons and their likely growth over time. Third, the average age of being afflicted by HIV (25 years) and AIDS. Third, the degree of disability from the HIV infection (from the Global Burden of Disease, Murray and Lopez, 1996) and its impact on earnings over the eight years persons would continue to live. The present value of these earning streams were then calculated on the basis of the assumptions made.

4.11 The findings, based on all of the above assumptions, show this component having an IRR of about

36 percent, assuming the lowest or most pessimistic values for all parameters. If by Mid-term Evaluation, these interventions are working well, the country should consider making a much larger investment to implement on a national scale.

4.12 Cost-Effectiveness Analysis of the HIV/AIDS/STDs Component. A similar set of assumptions were required for estimating the DALYs saved from averting HIV and other STDs, as was made in estimating the HIV cases averted. In addition, an estimate of the number of DALYs saved from non-HIV cases of STDs averted was also included in the assessment. This was because the envisioned prevention programs for HIV within high risk populations tend to significantly reduce the incidence of other rapidly increasing STDs such as syphilis and gonorrhea (e.g., condom promotion, and rapid treatment of STDs) . Also included in the estimate of DALYs saved from the proposed interventions was an estimate of non-HIV related STD DALY savings. A conservative DALY estimate was made for every HIV related DALY saved by averting HIV, an additional 0.25 STD related DALY would be saved from the reduction of the incidence of STDs. Finally, while it is known that the growth of HIV has contributed to the rapid expansion in the incidence of TB, it was unclear how to include the TB related DALY savings into this assessment. Thus, the estimate of the cost per DALY saved may be higher than it might if the TB factor was also included.

4.13 This analysis suggests that the STDs interventions in the four provinces costs between RMB 104 to RMB 139 (US$12.5 to US$16.8) per DALY saved. While this cost is higher than for the MCH program interventions, it is much lower than many other possible preventive health programs in China. It also has the added benefit of contributing to the containment of a potentially devastating epidemic, which has cost many Sub-Saharan African countries up to one percent of per capita growth per year for the foreseeable future. Since the epidemic is still relatively contained in China to high risk populations, the potential benefits will not be as great as when the prevalence of the disease is as high as in other areas of Asia and Africa.

4.14 Blood Management CBA. Blood in China is purchased and sold by individuals operating in a government regulated market. The government dominates the buying and selling by serving as monopoly (or nearly a monopoly) in the management of both. The only source for blood (in a legal sense) is through the government blood banks. Provincial Bureaus of Health set the prices paid by the blood banks to blood donors (equal to RMB 100, September 1998) and the prices paid by those receiving blood from the blood banks (equal to RMB 183-200, September 1998).

4.15 Finally, to calculate the IRR for this subcomponent, it was necessary to assess the demand for blood in these project provinces. This assessment is based on limited information regarding trends in the rising demand for blood. The assumptions included in this assessment were: (a) demand will rise as population increases; (b) demand will not be affected by price increases, as the decision for using blood is primarily take by the physician or other health care provider on behalf of the patient; and (c) income increases will influence the demand for blood. An estimate for the income elasticity for blood was estimated from limited information included in the four provinces PIPs and it was about 1.01. Two other alternative estimates were included in the assessment including 1.1 and 1.2. Alternative income increases were also assessed, including 3.5 percent per year, 5 percent per year, which is the most likely scenario, and 6.5 percent per year.

4.16 Based on these charges remaining stable, trends in the demand for blood, and the expected capital and recurrent costs to be incurred via the project over the next ten years, the IRR will greatly exceed 5,000 percent.

4.17 Blood Transfusion Services Subcomponent CEA. This subcomponent not only provides benefits in the form of reduced prevalence and incidence of diseases transmitted via the blood supply, it also improves the quality of inpatient health services, including during child birth, especially during surgery. It is difficult to quantify these two sets of benefits in a consistent manner. However, this assessment has evaluated one scenario based on a reduction in the incidence of three important blood transmitted health problems: (a) HIV; (b) other STDs such as syphilis; and (c) Hepatitis B and C.

4.18 The scenario includes a number of assumptions so that a quantitative calculation might be made. The cost estimates for this subcomponent in the provincial proposals were used, along with assumptions regarding: (a) timing of expenditures over the ten year period of evaluation; and (b) the size of the recurrent expenditures required to sustain this service program after the five year life of the project. One of the project provinces included a table indicating a prospective expenditure time line and it was assumed that other provinces would configure their expenditures similarly. Thus, about 40 percent of the expenditures are assumed to occur in each of the first two years of the project, with the third year about 18 percent, and the balance going for the recurrent expenditures subsequently. It is assumed that the recurrent expenditures will continue past the five year life of the project at the same rate of expenditure as during the last two years of this subcomponent.

4.19 The estimation of DALYs saved from safer blood also required several assumptions. First, Hepatitis B and C are major health problems in China today with about 0.35 percent of the annual disease burden attributed to it. By investing in improved blood supply procedures and equipment, it is thought that at least 80 percent of the hepatitis burden in these provinces could be prevented each year after the program was fully implemented. Thus, a share of the estimated annual DALYs lost from hepatitis begins at a 20 percent savings in the first year and rises by ten percent each year until reaching 80 percent in year six. Second, experts believe at least ten percent of the STD burden of disease could be prevented by reducing the spread of syphilis. Third, it is thought that about ten percent of the new cases of HIV is due to blood contamination.

4.20 On the basis of these enumerated assumptions, a cost-effectiveness ratio was calculated related to the preventive benefits accruing from improving the blood supply. The estimate shows that it costs about RMB 181 (US$21.85) per DALY saved. While this figure is more costly than for other project components assessed, it remains a "good buy", especially if the impact on quality of care for hospital based care is also included. The analysis also shows that after the initial cost of investment, the recurrent cost-effectiveness ratio drops to about RMB 20 (US$2.40), a "very good buy".

5. Poverty Assessment

5.1 The three major project sub/components vary in the extent to which they directly address poverty alleviation. The component addressing MCH is primarily focussed on mitigating adverse social impacts of poverty, along with improving health status of women and children. This component will be implemented in 113 poverty designated counties in five provinces: Guizhou, Hainan, Hunan, Jilin, and Xinjiang.

5.2 First, it will extend the benefits which have been realized via the Health VI Project implemented in 282 poverty designated counties of eight provinces covering nearly one hundred million persons, and an additional 51 million persons residing in poverty designated counties. The "poverty" counties in these provinces have an average per capita income equaling about 83 percent of the average per capita income in these provinces, with the range being 87 percent in Guizhou to 63 percent in Xinjiang. These poverty

counties have a per capita income less than 25 percent of the average national per capita income. Further, the share of total provincial income in these counties is about 26 percent (range 14 percent in Xinjiang to 30 percent in Hunan), whereas the total population residing in them is about 33 percent.

5.3 Second, IMR and MMR are 50 percent and 30 percent greater, respectively, in the poverty designated counties than the corresponding provincial averages, and are about 75 percent and 250 percent greater, respectively, than national norms. Thus, by directly improving the MCH services in poverty designated counties, human welfare can be directly enhanced. The experience gained during the implementation of the first three years of the Health VI Project suggests that these health status differentials between poverty and non-poverty counties can be realized within the five year life of the proposed project.[3]/

5.4 The HIV/AIDS/STDs Component also has a poverty focus but not as distinct as the MHCD Component. It seeks to slow the rapid increase in the incidence and prevalence of all STDs as well as HIV/AIDS. As the epidemic matures in China, the locus of disease will increasingly reside within disenfranchised population(s). These populations include those who are migrating from rural to urban areas to seek better economic opportunities in urban areas, or those who have been laid off from state owned enterprises or other employers and have used the informal employment market for sexual services to continue to earn a living. As this component works out the details for implementing successful preventive programs in a number of high risk groups in specific cities and towns, its focus can increasingly become poverty alleviating.

5.5 Finally, the blood transfusion services subcomponent can also alleviate poverty as it enhances the quality of blood and blood products used in health service provision. This is due to the fact that a greater share of the poor cannot obtain high quality blood products in times of need because of costs. To the extent improvements in the nation's blood supply are realized, poverty alleviation can occur as a positive externality.

[3] See The Mid-term Evaluation Report on Comprehensive Maternal and Child Health Project in China, July 1998.

Annex 5
Fiscal Analysis

This analysis examines: the fiscal burden of the project during implementation and the sustainability of the project after completion; and the assessment of financial management.

1. Affordability and Sustainability

1.1 Affordability. The recently completed World Bank study of health financing in China shows that national expenditures on health comprise a growing share of GDP, from about three percent in 1978 to probably over four percent in 1998. If so, per capita expenditure for health in 1998 is estimated at RMB 265 per person, up from RMB 111 per person in 1993.[1]/ In 1993, the public sector share of that spending was about 14 percent, falling from 32 percent recorded in 1986 and 28 percent in 1978. The recurrent share of public funding in 1993 was about 57 percent of the total public spending for health in that year, or about RMB 8.8 per person.[2]/ The current public level of spending on health is RMB 37.7 per capita. In the poverty provinces included in the HIV/AIDS/STDs Component, public funds for recurrent health services average RMB 11 per person per year as of 1996, which is considered low.

1.2 Nearly all Bank supported health sector projects in China have claimed that because the recurrent expenditures of the implemented health investments were such a small share of national health expenditures (generally less than one percent of total public recurrent expenditures), and economic growth was high, fiscal sustainability would occur if political will at the appropriate government level allocated sufficient recurrent budgetary resources for the proposed public health intervention. However, in 1997, the World Bank report on health sector financing demonstrated that, in spite of this theoretical possibility of fund adequacy, provincial and county budget allocations have often been too low to sustain preventive health service provision. As a result, the national government has become more concerned with this issue and has renewed its policy priorities for public health services and has initiated measures for ensuring adequate funding support. In January 1997, the State Council of the People's Republic of China released its Decision Paper on Health Reform and Development, which included a directive to all levels in China to increase the government budgetary allocation for health in line with overall economic development.

1.3 Since part of this project (MHCD Component) is being implemented in poor rural counties where the per capita income is only one-third to one-half the national average, it is more important than in previous projects to assess whether this project's specific investments can be financially sustainable by the government entities responsible for financial sustainability. This is even more important since one of the critical elements of the MHCD anti-poverty component is to initiate local administered poverty relief funds to enable the very poor (the lowest five percent of the population) to obtain ante-natal, delivery, and post-natal services. The Health VI Mid-term Evaluation suggests that this aspect of the earlier project has encountered financial and administrative difficulties, and that further intensive study is required to improve

---

[1] Calculated from data for GDP found in the 1998 CAS report, using the present market rate of exchange from US dollars and RMB of 8.28 RMB/US$.

[2] Calculated from data found in World Bank, China: Issues and Options in Health Financing, Report No. 15278-CHA, p. 78 (Washington D.C.: World Bank, August 12, 1996).

the financial and service provision obtained via poverty relief funds.[3]/ The role of the poverty relief fund in relationship to other broader based rural health insurance mechanisms under development warrants special study at this time to ensure complementary design and role development.

1.4 From the BCA analysis conducted and summarized above, it has been estimated that the recurrent cost of sustaining the project's MCH investments in the five provinces will be about RMB 0.45 per capita per year. Based on this finding, and total public financing of health care information, the MHCD Component comprises about 5.1 percent of present total public expenditures on health. This share is greater than the guidelines for all preventive programs, which are expected to cost about three percent of total public expenditures for health. Thus, without considering the additional project components, it is likely that financial sustainability may be in some jeopardy unless the current financing guidelines can be modified.

2. Assessment of Financial Management

2.1 In accordance with the Bank's O.P./B.P. 10.02, the team reviewed the financial management arrangements of current Bank supported health projects in the participating provinces, as similar arrangements will be adopted under this project. It was found that: (a) The project accounting system is independent from the government budget system although some counterpart funds come from government budget. The document on accounting and financial reporting for Bank financed projects in China, issued in 1993 and revised in 1996 by MOF, has been used by the projects. Based on the MOF document, the specific written accounting policy and procedure manuals for each project have been prepared by FLO and distributed to relevant project staff at each level. In general, the accounting systems are working well although most are manual and not computerized; (b) Internal control and segregation of responsibility. The project budget is prepared by the project units, and executed after review and approval by the Project Management Offices (PMOs) and FBs. MOF and FLO are responsible for final approval and monitoring of budget implementation. The project accounting books are kept in the project offices and units. MOF and FBs are responsible for Bank disbursements. The project cash disbursement and expenditure approval procedures follow MOF's regulations. Claims are expedited by the project office at each level, with review by FB at each level before submission to the level above. Funds are transferred from level to level through commercial banks nominated by FB at each level. The original supporting documents are kept in the project offices and units, and usually one copy is kept in provincial FLOs; (c) Staffing. The PMOs have designated financial units whose staff has clearly defined and separate functions. Most financial staffs at provincial and above levels have financial education background and working experience on Bank financed projects, but most provincial financial staffs at county or below levels do not have sufficient skills; (d) Financial statements are regulated by the MOF document, and include Balance Sheet, Statement of Project Progress, Statement of the Bank Funds Use, Statement of Expenses Profile, and Statement of Special Account; and (e) Audit. The project accounts and accounting reports will be audited by the State Audit Administration or its local offices in accordance with standard practices in China, which have been found acceptable to the Bank.

2.2 The main issues identified during the financial assessment were: (a) delays in processing and flow of funds due to complexity and lack of understanding of procedures, regulations, and internal disbursement procedures, which involve PMOs and FBs at each level; (b) financial statements are not very useful to

[3] See The Mid-term Evaluation Report on Comprehensive Maternal and Child Health Project in China, pp. 131-141, July 1998.

MOH for project management or to the Bank for project monitoring; and (c) financial staffs at county or below levels lack training, reference manuals, and project documents.

2.3 In response to the financial assessment, the Borrower agreed to improve the project's financial management arrangements, through the following actions: (a) FLO will prepare a detailed manual on accounting and internal disbursement procedures, and make it readily available to the PMO financial units. Training and retraining on financial management will be included in the technical assistance plan; (b) additional reporting formats will be introduced according to the Bank's "Guide for Review and Design of Accounting and Reporting Systems for World Bank Financed Projects." The reports should be useful to the Bank and MOH, and practical for use under the accounting system. The reporting formats will be available before project start-up; and (c) although the internal disbursement procedures regulated by MOF will not be changed, some methods such as increasing provincial level revolving funds will be adopted to shorten the timing of process and flow of funds. The Bank's resident mission in Beijing (RMC) will provide support in implementation of these actions, through training and technical assistance, and in review and supervision of financial management of the project.

Annex 5 Table
Financial Summary

Bank Fiscal Year Ending June 30
(US$'000, 1998)

	Implementation Period							Total
	1999	2000	2001	2002	2003	2004	2005	
Project Costs								
Investment Costs	1.05	5.52	8.21	11.88	16.85	13.88	9.24	66.63
Recurrent Costs	0.36	1.99	3.06	4.55	6.63	5.84	4.85	27.28
Total	**1.41**	**7.51**	**11.27**	**16.43**	**23.48**	**19.72**	**14.09**	**93.91**
Financing Sources (% of total project costs)								
IBRD/IDA	65%	65%	66%	66%	64%	63%	60%	64%
Government	35%	35%	34%	34%	36%	37%	40%	36%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Note: Differences due to rounding.

Annex 6
Procurement and Disbursement Arrangements

Procurement

1. The loan and credit will be used to finance procurement of goods, civil works, and services. Procurement under the project will follow the two current Bank Group guidelines for procurement of goods, civil works, and services: (a) *Guidelines: Procurement under IBRD Loans and IDA Credits, dated January 1995 and revised in January and August 1996 and September 1997 (Procurement Guidelines)*; and (b) *Guidelines: Selection and Employment of Consultants by World Bank Borrowers, dated January 1997, and revised in September 1997 (Consultant Guidelines)*. The China Model Bidding Documents for International Competitive Bidding (ICB) and National Competitive Bidding (NCB) procedures will be used. All consultant assignments will follow the Standard Request for Proposals – Selection of Consultants, dated July 1997.

2. The project's national level implementing unit, the Foreign Loan Office of MOH, has managed procurement for eight earlier Bank supported health projects, and most of the project provinces and many of the counties also have experience of previous projects.

Summary of Procurement Arrangements (Table A)

3. **Civil Works** (US$8.04 million including contingencies). The project will finance new construction and rehabilitation of MCH care and HIV/AIDS/STDs institutions and training facilities. The value of work on any individual health institution and facility will usually be less than US$50,000. As many of the institutions and facilities are in remote locations and as construction will be spread over time due to factors such as planning procedures and climate, the work is unlikely to be of interest to foreign bidders.

4. Works contracts costing US$300,000 or less (not anticipated to exceed US$1.61 million in the aggregate), will be procured through NCB. Smaller works contracts, each costing less than US$100,000, not to exceed US$4.42 million in the aggregate, will be awarded on the basis of quotations obtained from three qualified bidders, with the contract awarded to the lowest evaluated bidder. Township construction teams will be encouraged to bid. Minor repairs and works contracts estimated to cost less than US$25,000 in scattered and remote areas, may be procured by force account in a manner satisfactory to the Bank, not to exceed US$1.21 million in the aggregate.

6. **Goods** (US$38.22 million including contingencies). Goods including equipment, vehicles, medical supplies, and materials will be procured for the project. Previous experience with implementation of health projects in poor rural areas indicates there will be limited use of ICB for procurement of goods. The selection of an item for procurement through ICB may be based on technical specifications (for some medical and communication equipment and vehicles), as well as the estimated aggregate size of the package. Goods contracts of US$300,000 or above, and contracts for vehicles regardless of contract cost, will be procured through ICB. Agreement has been reached on a list of selected equipment items that will be procured using ICB, which is subject to review during project implementation. Qualified domestic manufacturers will be eligible for a margin of preference in bid evaluation of 15 percent or the prevailing rate of custom duty, whichever is less. Contract packages costing less than US$300,000, not to exceed US$15.29 million in the aggregate, if not procured by ICB, will be procured through NCB acceptable to

the Bank. International suppliers may compete in these procedures. Contracts with an estimated value of less than US$30,000 each, not to exceed US$4.97 million in the aggregate, will be awarded through national shopping procedures after solicitation and evaluation of at least three written price quotations. Goods which should be procured as an extension of an existing contract, or which must be purchased from the original supplier, are of a proprietary nature, or from a particular supplier as a condition of a performance guarantee, not to exceed US$0.76 million in the aggregate, subject to the approval of the Bank on a case-by-case basis, may be awarded on a direct contract basis, in accordance with procedures acceptable to the Bank.

7. Equipment lists for the project have been prepared by the Borrower and reviewed by the Bank, and are detailed in the PIPs. The equipment lists will be reviewed during the Mid-term Evaluation, with a view to introducing newly available appropriate technology.

8. **In-country and Overseas Training** (US$16.57 million including contingencies). This category includes training expenses such as courses, workshops, and travel and subsistence allowances. Overseas study tours and placement of candidates in foreign institutions would be made on the basis of relevance and quality, cost and prior experience, following government procedures. Local training will be carried out in selected institutions on the basis of training programs described in the PIPs. Each county's annual training progress and the next year's plan will be reviewed by relevant provincial experts, and reported to the project's expert group.

9. **Technical Assistance** (US$3.45 million including contingencies). Technical assistance (TA), provided by individuals and institutions, both local and international, will be selected and contracted in accordance with the Consultant Guidelines. Most TA will be for contracts of less than US$100,000, using Selection Based on Consultants' Qualifications, or the procedures for employing service delivery contractors and individuals. The Bank will review progress reports and annual plans for TA for provincial and central levels.

10. **Health Services** (US$2.78 million including contingencies). Through the mechanism of poverty relief funds the project will fully or partially reimburse service providers for approved health services to designated and eligible very poor families in the project areas. The county health bureau will manage the fund, according to management and reporting requirements acceptable to the Bank. Some costs of high priority medical services such as maternal care and immunization, used by other designated groups, may also be reimbursed to approved service providers, according to guidelines acceptable to the Bank.

11. **Program Support** (US$20.75 million including contingencies) will include: surveillance and monitoring activities, logistical support, information collection and reporting, workshops (excluding training materials), medical supplies (excluding drug reagents), non-medical supplies and materials, transportation, accommodations, consumable materials, and allowances for health staff, but excluding staff salaries. Program support is critical to reverse the recent decline in availability of funds for the management and maintenance of preventive health care programs. In addition, by demonstrating the benefits of adequate program support, the project would increase internal support for such expenditures in the Government. For these reasons, financing of program support will be on a fixed rather than declining basis.

Thresholds for Procurement Methods and Prior Review (Table B)

13. Prior review by the Bank of all stages of the bidding process will be required for: (a) the first two proposed works contracts from each province, regardless of the cost; (b) the first two proposed NCB goods contracts from each province; and (c) all goods and works contracts procured using ICB. In view of the social objective of the project and using parameters developed in previous health projects, prior review coverage will be of approximately 15 percent of works contracts and 65 percent of goods contracts.

14. The Terms of Reference (TORs) for all overseas study tours, including the criteria for selection of participants, will be subject to prior review by the Bank. TA contracts with firms of US$100,000 equivalent or more and contracts with individuals of US$50,000 equivalent or more will require the Bank's prior review and approval of budgets, short-lists, selection procedures, letters of invitation, proposals, evaluation reports, and contracts.

Post Review

15. It is expected that post review of documents related to 25 percent of contracts and direct purchases will be conducted according to Bank guidelines. This arrangement will be assessed during the Mid-term Evaluation, and if indicated the percentage may be reviewed.

Disbursement

16. The proposed loan of US$10.0 million and credit of US$50.0 million equivalent would be disbursed over a period of six years, up to the closing date of June 30, 2006. The allocation of loan and credit proceeds according to expenditure category is outlined in Table C.

17. Disbursements will be made against statements of expenditure (SOEs) for: (a) works under contracts costing less than US$300,000 each; (b) goods under contracts costing less than US$300,000 each; (c) contracts for the employment of consulting firms valued at less than US$100,000 each, and contracts for the employment of individuals valued at less than US$50,000 each; and (d) training and program support. These limits are based on previous experience, and the nature and complexity of the project. Documentation supporting the SOEs would be retained by FLO in MOH and the Project Management Offices in the provinces and made available for review by Bank supervision missions. All other disbursements from the loan and credit would be against full documentation.

18. Special Accounts. To facilitate disbursement there will be five Special Accounts for the project: one for Component A and Component C; and one for each province under Component B. The Special Accounts would be established in US dollars, in commercial banks acceptable to the Bank and on terms and conditions satisfactory to the Bank. The Special Accounts would be used for all eligible foreign and local expenditures. Applications for replenishment of the Special Accounts would be submitted monthly or whenever the Account has been drawn down by about 50 percent of the initial deposit, whichever occurs first. The aggregate initial deposit for the five Special Accounts is US$2.88 million equivalent.

19. To ensure timely start-up of the project, retroactive financing of up to SDR 2.2 million (US$3.0 million equivalent) would be available for payments made for eligible expenditures incurred after January 1, 1999.

Project Accounts and Financial Reporting

20. Separate project accounts showing expenditure for project activities will be maintained by the BOF at each level, and for central level expenditures by MOH. With assistance of MOF, a total project account will be maintained by the central level PMO in two books, one for project provinces and the other for the expenditure categories for the whole project. Each county and prefecture project office will submit regular financial management reports to the provincial project office. Provinces will submit their financial management reports regularly to the PMO in MOH for review and summary. The financial statements will include the following:

- Statement of Sources and Uses of Fund (including information on expenditure by disbursement category).
- Statement of Costs by Component, showing actual against the budgeted costs with variances.
- Statement of Unit Variance, comparing the actual and planned physical output with the actual and planned cost for each unit of output.
- Special Account Reconciliation Statement, which will be the basis for replenishment.

21. Project accounts would be audited by the State Audit Administration or its local offices in accordance with standard practices in China, which have been found acceptable to the Bank.

22. The Borrower will submit three types of financial reports to the Bank's disbursement office, in format and at a frequency acceptable to the Bank.

A. Financial Statements as described above.
B. Project Progress Report.
C. Procurement Report for prior review contracts for goods, works and consultant services.

Annex 6

Table A: Project Costs by Procurement Arrangements

(in US$ million equivalent)

Expenditure Category	Procurement Method				Total Cost (including contingencies)
	ICB	NCB	Other a/	N.B.F.	
Civil Works		1.61	5.63	0.80	8.04
		(0.42)	(1.67)	(-.-)	(2.09)
Equipment, Vehicles & Medical Supplies	17.20	15.29	5.73		38.22
	(13.39)	(11.90)	(4.46)		(29.75)
Training					
In-country			13.96		13.96
			(8.85)		(8.85)
Overseas			2.61		2.61
			(2.61)		(2.61)
Technical Assistance			3.45		3.45
			(3.41)		(3.41)
Health Services				2.78	2.78
				(-.-)	(-.-)
Program Support			20.75		20.75
			(12.58)		(12.58)
Operation & Maintenance				3.40	3.40
				(-.-)	(-.-)
Unallocated					0.71
					(0.71)
Total	**17.20**	**16.89**	**52.13**	**6.98**	**93.91**
	(13.39)	**(12.32)**	**(33.59)**	**(-.-)**	**(60.00)**

Notes:

ICB = International Competitive Bidding

NCB = National Competitive Bidding

a/ = This category includes consultant services, research and evaluation procured following Consultant Guidelines; training; national shopping; direct contracting; force account; small works; and administrative and operational costs.

N.B.F. = Not Bank financed (includes elements procured under parallel cofinancing procedures, consultancies under trust funds, and any other miscellaneous items).

Figures in parenthesis are the amounts to be financed by the Bank loan and credit.

Differences due to rounding.

Annex 6
Table B: Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
Civil Works	> $100,000	NCB	All contracts costing $300,000 or more; and the first two proposed works contracts from each province regardless of the cost.
	< $100,000	On the basis of quotations obtained from at least three qualified contractors eligible under the Guidelines, up to an aggregate not exceeding US$4.42 million equivalent.	
	< $25,000	by Force Account as a last resort in a manner satisfactory to the Bank, up to an aggregate not exceeding US$1.21 million equivalent.	
Equipment, Vehicles & Medical Supplies	> $300,000 and all vehicles	ICB	All ICB contracts; and the first two proposed NCB contracts from each province.
	Other goods < $300,000	NCB	
	Other goods < $30,000	National Shopping	
	Proprietary Items	Direct Contracting	
Training	N.A.	Other	Annual plans for overseas travel and training for each year will be submitted to the Bank for review and discussion.
Technical Assistance	$100,000 for firms and $50,000 for individual consultants	• Selection Based on Consultants' Qualifications • Service Delivery Contractors • Individual Consultants	All consulting firms contracts costing $100,000 or more and individual consultants contracts costing $50,000 or more. All TORs for overseas study tours, including selection criteria for participants.
Health Services	N.A.	Service Delivery Contractors	
Program Support	N.A.	Other	

Annex 6
Table C: Allocation of Loan/Credit Proceeds

Category	Amount of the Loan Allocated (US$ million equivalent)	Amount of the Credit Allocated (US$ million)	% of Expenditures to be Financed
(1) For Part A of the Project:			
(a) Works		2.09	35%
(b) Goods (excluding supplies and materials under Program Support)		16.11	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.
(c) Training:			
(i) In-country		6.88	65%
(ii) Overseas		0.55	100%
(d) Consultants' Services:			
(i) Operational research studies		0.15	100%
(ii) Others		1.09	100%
(d) Program Support		6.40	60%
(e) Unallocated		0.71	
(2) For Fujian's Health Programs under Part B of the Project:			
(a) Goods (excluding supplies and materials under Program Support)	0.99	1.53	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.
(b) Training:			
(i) In-country	0.22	0.33	65%
(ii) Overseas	0.18	0.27	100%
(c) Consultants' Services	0.11	0.17	100%
(d) Program Support	0.64	0.97	60%

Category	Amount of the Loan Allocated (US$ million equivalent)	Amount of the Credit Allocated (US$ million)	% of Expenditures to be Financed
(3) For Guangxi's Health Programs under Part B of the Project:			
(a) Goods (excluding supplies and materials under Program Support)	1.11	1.71	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.
(b) Training:			
(i) In-country	0.13	0.20	65%
(ii) Overseas	0.16	0.24	100%
(c) Consultants' Services	0.12	0.18	100%
(d) Program Support	0.50	0.76	60%
(4) For Shanxi's Health Programs under Part B of the Project:			
(a) Goods (excluding supplies and materials under Program Support):	0.96	1.48	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.
(b) Training:			
(i) In-country	0.12	0.18	65%
(ii) Overseas	0.17	0.26	100%
(c) Consultants' Services	0.10	0.16	100%
(d) Program Support	0.66	1.00	60%
(5) For Xinjiang's Health Programs under Part B of the Project:			
(a) Goods (excluding supplies and materials under Program Support)	0.99	1.52	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.

Category	Amount of the Loan Allocated (US$ million equivalent)	Amount of the Credit Allocated (US$ million)	% of Expenditures to be Financed
(b) Training:			
(i) In-country	0.20	0.30	65%
(ii) Overseas	0.05	0.07	100%
(c) Consultants' Services	0.07	0.10	100%
(d) Program Support	0.44	0.66	60%
(6) For Part C(1) of the Project:			
(a) Overseas training		0.76	100%
(b) Consultants' Services:			
(i) Operational research studies under Part C(1)(b) of the Project		0.03	100%
(ii) Other services		0.81	100%
(3) For Part C(2) of the Project:			
(a) Goods (excluding supplies and materials under Program Support)	1.28	1.96	100% of foreign expenditures, 100% of local expenditures (ex-factory cost), and 75% of local expenditures for other items procured locally.
(b) Training:			
(i) In-country	0.11	0.17	65%
(ii) Overseas	0.24	0.36	100%
(c) Consultants' Services	0.13	0.19	100%
(d) Program Support	0.22	0.33	60%
(8) Front-end fee		0.10	
Total	**10.00**	**50.00**	

Note: Differences due to rounding.

Annex 7
Project Processing Budget and Schedule

A. Project Budget (US$'000)	Planned (At final PCD stage)	Actual (est. to Board pres.)
	n.a.	372.0

B. Project Schedule	Planned (At final PCD stage)	Actual
Time taken to prepare the project (months)	15	16
First Bank mission (identification)	December 1997	December 3, 1997
Appraisal mission departure	December 1998	December 2, 1998
Negotiations	February 1998	March 8, 1999
Planned date of Effectiveness	May 1999	August 15, 1999

Prepared by: Ministry of Health

Preparation assistance: PHRD Grants; Consultant Trust Funds

Bank staff who worked on the project included:

Jagadish Upadhyay (Senior Operations Officer and Task Team Leader), Darren W. Dorkin (Operations Analyst), Mary E. Ming Young (Health Specialist), Zhao Hongwen (Health Operations Officer), and Imani Haidara (Task Assistant). Maurice Le Blanc provided procurement advice; Zongcheng Lin advised on social issues; Margaret Png was the legal counsel; Hyung Min Kim, Yi-Ling Liu, and Chu Jun Xue advised on financial management and disbursement.

Consultants who contributed included:

Mark Belsey, Emile Fox, Rachel Green, Peter Lamptey, Brian McClellan, and Sheila Mitchell.

Peer Reviewers were:

Catherine Fogle (SASHP), Prabhat Jha (HDNHE), Theresa Jones (AFC10), Wendy Roseberry (AFTH1), and Anne Tinker (SASHP).

Annex 8
Documents in the Project File*

A. GOVERNMENT PROJECT DOCUMENTS

1. Project Implementation Plans

   (a) Part A of the Project: Maternal Health and Child Development. January 1999.
   (b) Part B of the Project: Prevention and Control of HIV/AIDS/STDs and Other Blood Borne Infections. January 1999.

2. Provincial Project Proposals. Revised for Appraisal. November 1998.

B. BANK TEAM MISSION DOCUMENTS

1. Identification, Preparation, Pre-appraisal, and Appraisal aide memoires and back-to-office reports.

*Including electronic files.

Annex 9
Status of Bank Group Operations in China
IBRD Loans and IDA Credits in the Operations Portfolio

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original Amount in US$ Millions			
					IBRD	IDA	Cancellations	Undisbursed
Number of Closed Loans/credits: 207								
Active Loans								
CN-PE-3591	IBRD43090	1998	PRC	STATE FARMS COMMERCI	150.00	0.00	0.00	150.00
CN-PE-3606	IBRD43040	1998	GOC	ENERGY CONSERVATION	63.00	0.00	0.00	63.00
CN-PE-40185	IBRD42370	1998	PRC	SHANDONG ENVIRONMENT	95.00	0.00	0.00	95.00
CN-PE-51736	IBRD43030	1998	GOC	E. CHINA/JIANGSU PWR	250.00	0.00	0.00	250.00
CN-PE-34081	IBRD42000	1997	PRC	XIAOLANGDI MULTI. II	230.00	0.00	0.00	230.00
CN-PE-34081	IBRD42001	1997	PRC	XIAOLANGDI MULTI. II	200.00	0.00	0.00	190.25
CN-PE-3590	IBRD41870	1997	PRC	QINBA MTS. POVTY RED	30.00	0.00	0.00	30.00
CN-PE-3590	IDAN0280	1997	PRC	QINBA MTS. POVTY RED	0.00	150.00	0.00	141.21
CN-PE-3635	IDA28980	1997	PRC	VOC. ED. REFORM PROJ	0.00	20.00	0.00	16.61
CN-PE-3635	IBRD4063A	1997	PRC	VOC. ED. REFORM PROJ	10.00	0.00	0.00	10.00
CN-PE-3637	IDAN0270	1997	PRC	NATL RUR WATER III	0.00	70.00	0.00	66.25
CN-PE-36405	IBRD41790	1997	PRC	WANJIAZHAI WATER TRA	400.00	0.00	0.00	358.66
CN-PE-3643	IBRD40990	1997	PRC	XINJIANG HIGHWAYS II	300.00	0.00	0.00	268.81
CN-PE-3650	IBRD41720	1997	GOC	TUOKETUO POWER/INNER	400.00	0.00	0.00	400.00
CN-PE-3654	IBRD41240	1997	PRC	HUNAN/GUANG HWY2-NH2	400.00	0.00	0.00	400.00
CN-PE-36952	IDA29540	1997	PRC	BASIC ED. IV	0.00	85.00	0.00	76.95
CN-PE-38988	IBRD41610	1997	PRC	HEILONGJIANG ADP	120.00	0.00	0.00	117.00
CN-PE-44485	IBRD41970	1997		SHANGHAI WAIGAOQIAO	400.00	0.00	0.00	400.00
CN-PE-34618	IBRD3967A	1996	PRC	LABOR MARKET DEV.	10.00	0.00	0.00	10.00
CN-PE-34618	IDA28000	1996	PRC	LABOR MARKET DEV.	0.00	20.00	0.00	15.60
CN-PE-3507	IBRD3933A	1996	GOC	ERTAN HYDRO II	177.68	0.00	0.00	51.63
CN-PE-3507	IBRD3933B	1996	GOC	ERTAN HYDRO II	88.84	0.00	0.00	4.04
CN-PE-3563	IBRD40010	1996	PRC	ANIMAL FEED	150.00	0.00	0.00	150.00
CN-PE-3569	IBRD39290	1996	P.R.C.	SHANGHAI-ZHEJIANG HI	260.00	0.00	7.75	141.26
CN-PE-3589	IDA27940	1996	PRC	DISEASE PREVENTION	0.00	100.00	0.00	78.99
CN-PE-3594	IBRD40280	1996	PRC	GANSU HEXI CORRIDOR	60.00	0.00	0.00	60.00
CN-PE-3594	IDA28700	1996	PRC	GANSU HEXI CORRIDOR	0.00	90.00	0.00	70.50
CN-PE-3599	IBRD40550	1996	YUNNAN PROV. GOV.	YUNNAN ENVIRONMENT	125.00	0.00	0.00	125.00
CN-PE-3599	IDA28920	1996	YUNNAN PROV. GOV.	YUNNAN ENVIRONMENT	0.00	25.00	0.00	16.54
CN-PE-3602	IBRD39660	1996	PRC	HUBEI URBAN ENV. PRO	125.00	0.00	0.00	125.00
CN-PE-3602	IDA27990	1996	PRC	HUBEI URBAN ENV. PRO	0.00	25.00	0.00	15.33
CN-PE-3638	IBRD40440	1996	PRC	SEEDS SECTOR COMMER.	80.00	0.00	0.00	80.00
CN-PE-3638	IDA28860	1996	PRC	SEEDS SECTOR COMMER.	0.00	20.00	0.00	10.05
CN-PE-3646	IBRD40450	1996	PRC	CHONGQING IND POL CT	170.00	0.00	0.00	170.00
CN-PE-3648	IBRD39870	1996	SHANGHAI MUN. GOVT	SECOND SHANGHAI SEWE	250.00	0.00	0.00	211.80
CN-PE-3649	IDA28340	1996	CHINA	SHANXI POVERTY ALLEV	0.00	100.00	0.00	49.20
CN-PE-3652	IBRD39860	1996	PRC	2ND SHAANXI PROV HWY	210.00	0.00	0.00	178.56
CN-PE-36950	IDA28310	1996	PRC	BASIC ED. POOR III	0.00	100.00	0.00	39.91
CN-PE-40513	IBRD40270	1996	PRC	2ND HENAN PROV HWY	210.00	0.00	0.00	198.00
CN-PE-3493	IBRD39106	1995	PRC	INLAND WATERWAYS	210.00	0.00	0.00	142.81
CN-PE-3571	IBRD38976	1995	PRC	RAILWAYS VII	400.00	0.00	0.00	392.00
CN-PE-3585	IBRD37880	1995	GOC	SHENYANG IND. REFORM	175.00	0.00	0.00	122.24
CN-PE-3596	IBRD3874A	1995	PRC	YANGTZE BASIN WATER	97.26	0.00	0.00	65.06
CN-PE-3596	IDA27100	1995	PRC	YANGTZE BASIN WATER	0.00	110.00	0.00	9.45
CN-PE-3598	IBRD37810	1995		LIAONING ENVIRONMENT	110.00	0.00	0.00	75.09
CN-PE-3600	IBRD3847A	1995	PRC	TECHNOLOGY DEVELOPME	194.99	0.00	0.00	174.53
CN-PE-3603	IBRD3773A	1995	PRC	ENT. HOUSING SOC. SE	262.51	0.00	0.00	240.11
CN-PE-3603	IDA26420	1995	PRC	ENT. HOUSING SOC. SE	0.00	75.00	0.00	6.20
CN-PE-36041	IBRD38736	1995	MOF	FISCAL & TAX REF. &	25.00	0.00	0.00	25.00
CN-PE-36041	IDA27090	1995	MOF	FISCAL & TAX REF. &	0.00	25.00	0.00	17.73
CN-PE-3612	IBRD37870	1995	PRC	XINJIANG HIGHWAY I	150.00	0.00	0.00	95.75
CN-PE-3634	IDA26550	1995	PRC	MATERNAL CHILD HEALT	0.00	90.00	0.00	33.43
CN-PE-3636	IDA26510	1995	PRC	BASIC EDUC IN POOR &	0.00	100.00	0.00	17.64
CN-PE-3639	IBRD39066	1995	PRC	SOUTHWEST POV. REDUC	47.50	0.00	0.00	35.59
CN-PE-3639	IDA27440	1995	PRC	SOUTHWEST POV. REDUC	0.00	200.00	0.00	99.00
CN-PE-3642	IBRD3846A	1995		ZHEJIANG POWER DEVT	154.15	0.00	0.00	93.74
CN-PE-3642	IBRD3846B	1995		ZHEJIANG POWER DEVT	215.67	0.00	0.00	178.66
CN-PE-3647	IDA26540	1995	PRC	ECONOMIC LAW REFORM	0.00	10.00	0.00	6.02
CN-PE-36947	IBRD3848A	1995	GOC	SICHUAN TRANSMISSION	270.00	0.00	0.00	196.37
CN-PE-37156	IBRD3914A	1995	PRC	IODINE DEF. DISORDER	7.00	0.00	0.00	7.00
CN-PE-37156	IDA27560	1995	PRC	IODINE DEF. DISORDER	0.00	20.00	0.00	11.37
CN-PE-3502	IDA25390	1994	MOH	RUR HEALTH MANPOWER	0.00	110.00	0.00	40.30
CN-PE-3504	IBRD37480	1994	PRC	HEBEI/HENAN NATIONAL H'WAYS	380.00	0.00	0.00	115.10
CN-PE-3540	IDA26160	1994	PRC	LOESS PLATEAU	0.00	150.00	0.00	41.90

Project ID	Loan or Credit No.	Fiscal Year	Borrower	Purpose	Original Amount in US$ Millions			
					IBRD	IDA	Cancellations	Undisbursed
CN-PE-3557	IDA26230	1994	PRC	FOREST RESOURCE DEV	0.00	200.00	0.00	94.86
CN-PE-3562	IBRD37270	1994	PRC	XIAOLANGDI MULTIPURPOSE	460.00	0.00	0.00	23.36
CN-PE-3586	IBRD3711S	1994	PRC	SHANGHAI ENVIRONMENT	160.00	0.00	0.00	79.76
CN-PE-3593	IDA25710	1994	PRC	SONGLIAO PLAIN ADP	0.00	205.00	0.00	58.55
CN-PE-3595	IDA25630	1994	PRC	RED SOILS II DEVELOP	0.00	150.00	0.00	46.75
CN-PE-3609	IBRD3716A	1994	GOC	SICHUAN GAS DEV & CONSERVATION	175.45	0.00	0.00	145.08
CN-PE-3622	IBRD3652S	1994	SHANGHAI MUNICIPAL GOVT	SHANGHAI MTP II	150.00	0.00	0.00	10.39
CN-PE-3626	IBRD3681A	1994	GOC	FUJIAN PROV HIGHWAY	80.33	0.00	0.00	60.53
CN-PE-3633	IBRD3687A	1994	GOVERNMENT OF PRC	TELECOMMUNICATIONS	132.76	0.00	0.00	79.19
CN-PE-3641	IBRD3718A	1994	PRC	YANGZHOU THERMAL POWER	248.16	0.00	0.00	89.75
CN-PE-3644	IDA26050	1994	PRC	XIAOLANGDI RESETTLEMENT	0.00	110.00	0.00	37.65
CN-PE-3473	IDA24750	1993	P.R.C.	ZHEJIANG MULTICITIES	0.00	110.00	0.00	43.82
CN-PE-3509	IDA24570	1993	PRC	CHANGCHUN WAT SUPP &	0.00	120.00	27.55	24.15
CN-PE-3512	IBRD3552S	1993	GOVT OF PEOPLES REP. OF C	SHANGHAI PORT REST.	124.26	0.00	0.00	5.11
CN-PE-3518	IBRD3530S	1993	PRC	GUANGDONG PROV. TRANSPORT	240.00	0.00	0.00	21.43
CN-PE-3526	IBRD3515A	1993	GOC	SHUIKOU II	43.86	0.00	0.00	18.40
CN-PE-3533	IBRD3572A	1993		TIANJIN IND. II	82.68	0.00	0.00	56.09
CN-PE-3559	IDA24620	1993	PRC	AGRIC. SUPPORT SERVI	0.00	115.00	0.00	10.43
CN-PE-3561	IDA24110	1993	PRC	SICHUAN ADP	0.00	147.00	0.00	22.59
CN-PE-3567	IDA24710	1993	PRC	EFFECTIVE TEACHING S	0.00	100.00	0.00	48.24
CN-PE-3570	IBRD35810	1993	PRC	RAILWAY VI	420.00	0.00	0.00	125.14
CN-PE-3580	IBRD35820	1993	PRC	SO.JIANGSU ENVIRON. PROTECT.	250.00	0.00	0.00	29.05
CN-PE-3581	IBRD35310	1993	PRC	HENAN PROV. TRANSPORT	120.00	0.00	0.00	16.15
CN-PE-3592	IDA24470	1993	PRC	REF. INST'L.& *PREINVEST(CRISP)*	0.00	50.00	0.00	21.57
CN-PE-3597	IBRD3560A	1993	PRC	TAIHU BASIN FLOOD CONTROL	88.65	0.00	0.00	64.71
CN-PE-3597	IDA24630	1993	PRC	TAIHU BASIN FLOOD CONTROL	0.00	100.00	0.00	4.92
CN-PE-3616	IBRD3606A	1993	PRC	TIANHUANGPING HYDRO	196.60	0.00	0.00	96.63
CN-PE-3623	IDA24230	1993	PRC	FINANCIAL SECTOR T.A	0.00	60.00	0.00	33.95
CN-PE-3627	IBRD3624A	1993	PRC	GRAIN DISTRIBUTION P	325.00	0.00	0.00	325.00
CN-PE-3627	IDA25180	1993	PRC	GRAIN DISTRIBUTION P	0.00	165.00	0.00	53.50
CN-PE-3632	IDA25220	1993	ROC	ENVIRONMENT TECH ASS	0.00	50.00	0.00	14.91
CN-PE-3486	IBRD3406A	1992		RAILWAYS V	33.73	0.00	0.00	29.05
CN-PE-3492	IBRD3412S	1992	GOC	DAGUANGBA-HAINAN	28.88	0.00	0.00	2.83
CN-PE-3492	IDA23050	1992	GOC	DAGUANGBA-HAINAN	0.00	37.00	0.00	.42
CN-PE-3503	IBRD3462A	1992		ZOUXIAN THERMAL POWE	26.78	0.00	0.00	14.02
CN-PE-3534	IBRD3471A	1992	PRC	ZHEJIANG PROV TRANSP	70.13	0.00	0.00	26.59
CN-PE-3544	IDA23390	1992	PEOPLE'S REPUBLIC OF CHIN	EDUC DEV IN POOR PRO	0.00	130.00	0.00	4.06
CN-PE-3555	IDA23070	1992	PRC	GUANGDONG AG. DEVT.	0.00	162.00	0.00	7.36
CN-PE-3564	IBRD3415A	1992	BEIJING MUNICIPALITY	BEIJING ENVIRONMENT	32.90	0.00	0.00	28.58
CN-PE-3564	IDA23120	1992	BEIJING MUNICIPALITY	BEIJING ENVIRONMENT	0.00	80.00	0.00	3.69
CN-PE-3565	IDA22960	1992		SHANGHAI METRO TRANS	0.00	60.00	0.00	3.75
CN-PE-3568	IDA23870	1992	R.O.C.	TIANJIN URB DEV & EN	0.00	100.00	0.00	32.32
CN-PE-3587	IDA23360	1992	PRC	RURAL WAT SUPP & SAN	0.00	110.00	0.00	1.80
CN-PE-3624	IDA23170	1992	MIN. OF PUBL.HEALTH	INFECTIOUS DISEASES	0.00	129.60	0.00	51.41
CN-PE-3478	IDA22100	1991	PRC	KEY STUDIES DEVELOPM	0.00	131.20	0.00	.82
CN-PE-3560	IDA22420	1991	PRC	HENAN AGRIC. DEVT.	0.00	110.00	0.00	3.22
CN-PE-3582	IBRD3337T	1991	PRC	IRRIG. AGRIC. INTENS	45.05	0.00	0.00	2.37
CN-PE-3472	IBRD2968S	1988	PRC	RAILWAY IV	171.30	0.00	0.00	2.04
Total					11,370.12	4,426.80	35.30	9,283.23

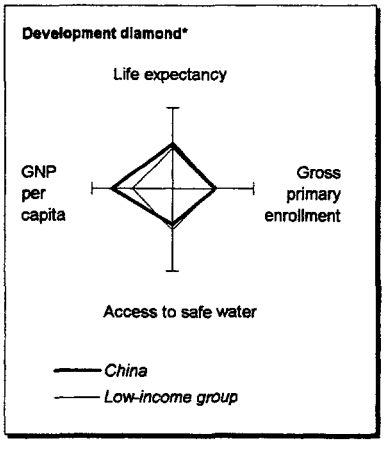
	Active Loans	Closed Loans	Total
Total Disbursed (IBRD and IDA):	6,441.79	12,596.06	19,037.85
of which has been repaid:	17.17	2,122.25	2,139.42
Total now held by IBRD and IDA:	15,744.44	10,116.00	25,860.44
Amount sold :	0.00	0.00	0.00
Of which repaid :	0.00	0.00	0.00
Total Undisbursed :	9,283.23	.21	9,283.44

a. Intended disbursements to date minus actual disbursements to date as projected at appraisal.
b. Rating of 1-4: see OD 13.05. Annex D2. Preparation of Implementation Summary (Form 590). Following the FY94 Annual Review of Portfolio performance (ARPP), a letter based system will be used (HS = highly Satisfactory, S = satisfactory, U = unsatisfactory, HU = highly unsatisfactory): see proposed Improvements in Project and Portfolio Performance Rating Methodology (SecM94-901), August 23, 1994.
Note: Disbursement data is updated at the end of the first week of the month.

China at a glance

8/15/97

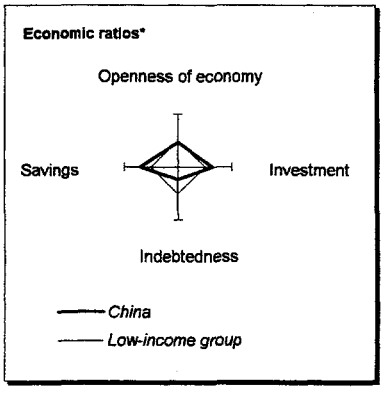
POVERTY and SOCIAL	China	East Asia	Low-income
Population mid-1996 *(millions)*	1,211.3	1,726	3,229
GNP per capita 1996 *(US$)*	750	890	500
GNP 1996 *(billions US$)*	903.8	1,542	1,601
Average annual growth, 1990-96			
Population *(%)*	1.1	1.3	1.7
Labor force *(%)*	1.1	1.3	1.7
Most recent estimate *(latest year available since 1989)*			
Poverty: headcount index *(% of population)*	9	..	..
Urban population *(% of total population)*	30	31	29
Life expectancy at birth *(years)*	69	68	63
Infant mortality *(per 1,000 live births)*	34	40	69
Child malnutrition *(% of children under 5)*	17	..	..
Access to safe water *(% of population)*	46	49	53
Illiteracy *(% of population age 15+)*	19	17	34
Gross primary enrollment *(% of school-age population)*	109	117	105
Male	..	120	112
Female	..	116	98



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

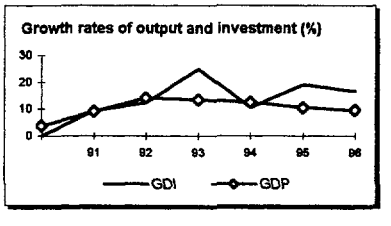
	1975	1985	1995	1996
GDP *(billions US$)*	160.3	378.1	755.9	914.2
Gross domestic investment/GDP	30.3	37.8	40.5	42.4
Exports of goods and services/GDP	5.2	9.9	21.0	18.5
Gross domestic savings/GDP	30.6	33.7	42.2	43.9
Gross national savings/GDP	30.6	34.0	40.6	42.8
Current account balance/GDP	-0.2	-3.9	0.2	0.5
Interest payments/GDP	..	0.2	0.9	0.5
Total debt/GDP	..	5.5	16.9	14.2
Total debt service/exports	..	8.3	9.4	6.7
Present value of debt/GDP	..	..	15.5	..
Present value of debt/exports	..	..	70.8	..

	1975-85	1986-96	1995	1996	1997-05
(average annual growth)					
GDP	8.3	9.9	10.5	9.7	8.5
GNP per capita	7.5	8.4	7.9	8.9	7.6
Exports of goods and services	17.2	*13.1*	9.6	7.4	8.6

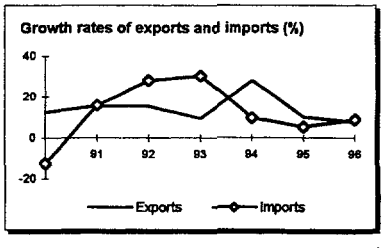


STRUCTURE of the ECONOMY

	1975	1985	1995	1996
(% of GDP)				
Agriculture	32.0	28.4	20.6	20.0
Industry	42.8	43.1	48.4	48.9
Manufacturing	31.6	35.4	37.6	38.9
Services	25.2	28.5	31.1	31.1
Private consumption	61.9	53.1	45.6	46.1
General government consumption	7.6	13.2	12.2	10.0
Imports of goods and services	5.0	14.0	19.3	17.0



	1975-85	1986-96	1995	1996
(average annual growth)				
Agriculture	5.4	*4.3*	5.0	5.1
Industry	10.4	*13.4*	14.1	12.7
Manufacturing	13.0	*12.9*	13.3	12.3
Services	9.8	*9.4*	7.9	7.8
Private consumption	8.2	*8.2*	6.3	3.3
General government consumption	9.0	*8.7*	..	11.4
Gross domestic investment	9.8	*11.3*	19.1	16.6
Imports of goods and services	22.1	*9.5*	5.0	8.6
Gross national product	9.0	9.9	9.0	9.9



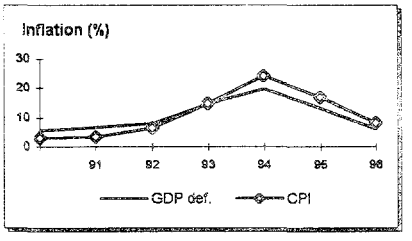
Note: 1996 data are preliminary estimates. Figures in italics are for years other than those specified.

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

China

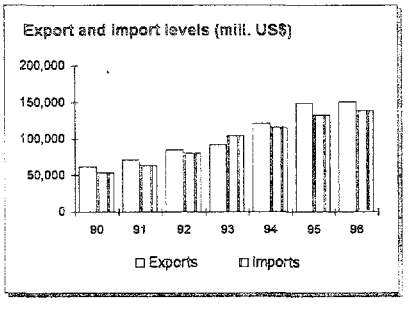
PRICES and GOVERNMENT FINANCE

	1975	1985	1995	1996
Domestic prices				
(% change)				
Consumer prices	..	9.3	16.9	8.3
Implicit GDP deflator	-0.9	10.1	13.1	6.1
Government finance				
(% of GDP)				
Current revenue	..	25.5	11.4	11.5
Current budget balance	..	6.7	-1.4	0.5
Overall surplus/deficit	..	-0.5	-1.7	-1.6



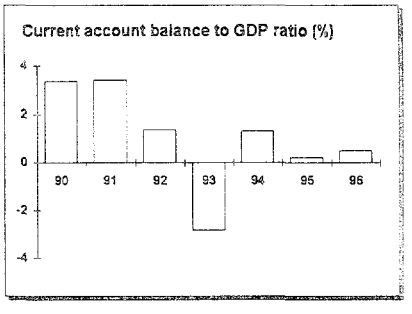
TRADE

	1975	1985	1995	1996
(millions US$)				
Total exports (fob)	..	27,350	148,770	151,073
Food	..	3,803	9,954	10,232
Fuel	..	7,132	5,335	5,929
Manufactures	..	13,522	127,283	129,141
Total imports (cif)	..	42,252	132,078	138,828
Food	..	1,881	9,126	7,866
Fuel and energy	..	172	5,127	6,877
Capital goods	..	18,694	57,481	63,901
Export price index *(1987=100)*	..	92	133	132
Import price index *(1987=100)*	..	78	132	131
Terms of trade *(1987=100)*	..	118	101	100



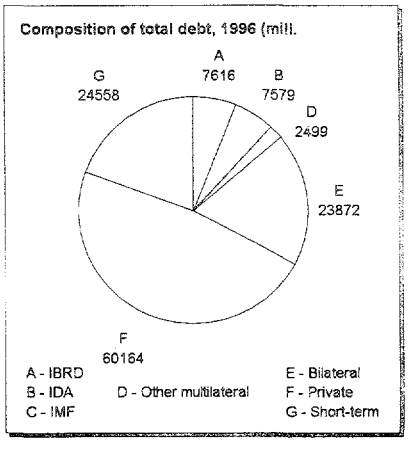
BALANCE of PAYMENTS

	1975	1985	1995	1996
(millions US$)				
Exports of goods and services	7,828	28,163	147,240	153,740
Imports of goods and services	8,097	41,149	135,284	141,340
Resource balance	-269	-12,986	11,956	12,400
Net income	0	932	-11,774	-10,370
Net current transfers	0	171	810	1,580
Current account balance, before official capital transfers	-269	-11,883	992	3,610
Financing items (net)	..	9,443	21,477	28,030
Changes in net reserves	..	2,440	-22,469	-31,640
Memo:				
Reserves including gold *(mill. US$)*	..	13,214	76,036	108,289
Conversion rate *(local/US$)*	1.9	2.9	8.4	8.3



EXTERNAL DEBT and RESOURCE FLOWS

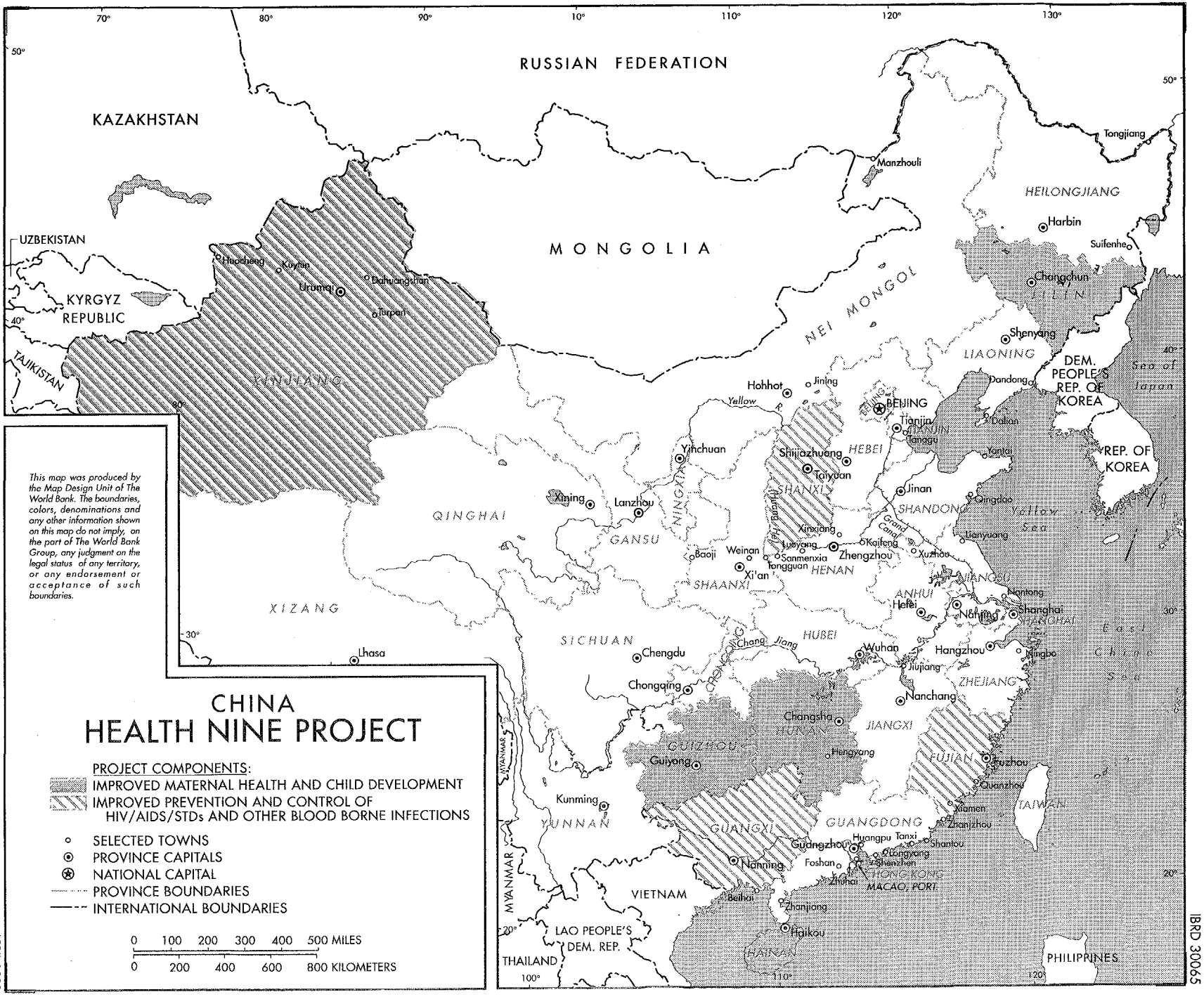
	1975	1985	1995	1996
(millions US$)				
Total debt outstanding and disbursed	..	16,696	118,090	126,288
IBRD	..	498	7,209	7,616
IDA	..	431	7,038	7,579
Total debt service	..	2,478	15,066	16,825
IBRD	..	26	810	840
IDA	..	4	63	73
Composition of net resource flows				
Official grants	..	117	329	..
Official creditors	..	1,117	7,202	7,193
Private creditors	..	2,867	5,683	1,873
Foreign direct investment	..	1,659	35,849	..
Portfolio equity	..	0	2,807	..
World Bank program				
Commitments	..	1,092	2,850	1,900
Disbursements	..	565	2,269	2,097
Principal repayments	..	0	364	364
Net flows	..	565	1,905	1,734
Interest payments	..	29	509	549
Net transfers	..	536	1,396	1,185



Development Economics. 1996 external debt and resource flows data are from DRS (preliminary). 8/15/97

Note: The dollar estimates for China's GNP per capita, GNP and GDP are preliminary figures based on an on-going World Bank study of China's GDP. They were calculated to facilitate inter-country comparisons. Official statistics are used as the basis for all other economic analysis contained in this document.

MAP SECTION



This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

CHINA
HEALTH NINE PROJECT

PROJECT COMPONENTS:

- IMPROVED MATERNAL HEALTH AND CHILD DEVELOPMENT
- IMPROVED PREVENTION AND CONTROL OF HIV/AIDS/STDs AND OTHER BLOOD BORNE INFECTIONS

- SELECTED TOWNS
- PROVINCE CAPITALS
- NATIONAL CAPITAL
- PROVINCE BOUNDARIES
- INTERNATIONAL BOUNDARIES

0 100 200 300 400 500 MILES
0 200 400 600 800 KILOMETERS

APRIL 1999

IBRD 30065