



Report and Recommendation of the President to the Board of Directors

INTERNAL

Project Number: 54118-001
September 2022

Proposed Loan People's Republic of China: Strengthening Public Health Institutions Building Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 25 August 2022)

Currency unit	–	yuan (CNY)		
	–	euro (€)		
CNY1.00	=	\$0.1458	or	€0.1463
\$1.00	=	CNY6.8596	or	€1.0033
€1.00	=	CNY6.8370	or	\$0.9967

ABBREVIATIONS

ADB	–	Asian Development Bank
COVID-19	–	coronavirus disease
DMC	–	developing member country
EIRR	–	economic internal rate of return
EMP	–	environmental management plan
FCTG	–	Fangchenggang City Culture and Tourism Group Co., Ltd
FMPG	–	Fangchenggang Municipal People's Government
GBH	–	Guiyang Bureau of Health
GDP	–	gross domestic product
GMPG	–	Guiyang Municipal People's Government
GMS	–	Greater Mekong Subregion
GPG	–	Guizhou Provincial Government
GRM	–	grievance redress mechanism
GZAR	–	Guangxi Zhuang Autonomous Region
GZARG	–	Guangxi Zhuang Autonomous Region Government
MOF	–	Ministry of Finance
NIHA	–	National Institute of Hospital Administration
O&M	–	operation and maintenance
PAM	–	project administration manual
PRC	–	People's Republic of China
SPPG	–	Shaanxi Provincial People's Government
WHO	–	World Health Organization
YUAH	–	Yan'an University Affiliated Hospital

NOTE

In this report, "\$" refers to United States dollars.

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PROJECT AT A GLANCE

1. Basic Data		Project Number: 54118-001	
Project Name	Strengthening Public Health Institutions Building Project	Department/Division	EARD/EASS
Country Borrower	China, People's Republic of People's Republic of China	Executing Agency	Fangchenggang Municipal People's Government, Guiyang Municipal People's Government, Shaanxi Provincial People's Government
Country Economic Indicators Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/?id=54118-001-CEI https://www.adb.org/Documents/LinkedDocs/?id=54118-001-PortAtaGlance		
2. Sector		Subsector(s)	
✓ Health	Disease control of communicable disease Health system development	ADB Financing (\$ million)	
			150.000 150.000
		Total	300.000
3. Operational Priorities		Climate Change Information	
✓ OP1: Addressing remaining poverty and reducing inequalities		GHG reductions (tons per annum)	4,834
✓ OP2: Accelerating progress in gender equality		Climate Change impact on the Project	Medium
✓ OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability			
✓ OP6: Strengthening governance and institutional capacity		ADB Financing	
✓ OP7: Fostering regional cooperation and integration		Adaptation (\$ million)	1.900
		Mitigation (\$ million)	0.860
		Cofinancing	
		Adaptation (\$ million)	0.000
		Mitigation (\$ million)	0.000
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 3.3, 3.8, 3.d SDG 13.a		Gender Equity (GEN)	✓
		Poverty Targeting	
		General Intervention on Poverty	✓
4. Risk Categorization:	Complex		
5. Safeguard Categorization	Environment: B Involuntary Resettlement: A Indigenous Peoples: B		
6. Financing			
Modality and Sources		Amount (\$ million)	
ADB		300.000	
Sovereign Project (Regular Loan): Ordinary capital resources		300.000	
Cofinancing		0.000	
None		0.000	
Counterpart		331.456	
Government		331.456	
Total		631.456	
Currency of ADB Financing: Euro			

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the People's Republic of China (PRC) for the Strengthening Public Health Institutions Building Project.

2. The proposed project will strengthen public health institutional capacity in the Guangxi Zhuang Autonomous Region (GZAR), Guizhou Province, and Shaanxi Province, aligned with the comprehensive Healthy China 2030 reforms and the aim to develop model centers of public health excellence in underdeveloped areas. The project will improve public health service capacity and provision through (i) better public health policies and health security emergency preparedness, (ii) a more effective public health ecosystem through upgraded public health facilities and laboratories, and (iii) enhanced training for public health staff and international cooperation.

II. THE PROJECT

A. Rationale

3. The project introduces an institutional approach to addressing public health management gaps by strengthening public health institutional capacity in the PRC. Health system development has progressed following decades of rapid economic growth, but the PRC currently faces increasingly complex health challenges, including an overreliance on hospital-centric curative care to the detriment of cost-effective preventive medicine; gaps in health care quality and equity, leading to overburdened urban hospitals as people often bypass community hospitals and facilities in favor of large tertiary hospitals in urban centers; and a rapidly increasing elderly population that requires specialized services.¹ Weak institutional governance and capacity as well as a shortage of high-quality public health workers were issues highlighted by the World Health Organization (WHO) and other international development institutions prior to the coronavirus disease (COVID-19) pandemic.² The COVID-19 pandemic has further highlighted obstacles and development needs in the public health system.

4. **Strategic context.** The PRC has experienced 4 decades of rapid economic growth. The PRC's gross domestic product (GDP) reached \$14.7 trillion in 2020, accounting for 17.4% of global GDP, compared with just 1.7% in 1978. By 2020, the PRC had lifted almost 800 million people out of poverty since reforms began in 1978. Economic growth has enabled investments in the health sector that have resulted in high universal health coverage, improved access to health services, reduced child mortality (from 37 in 2003 to 9.5 per thousand live births in 2020) and maternal mortality (from 59 in 2003 to 18 per 100,000 live births in 2020), and increased life expectancy (from 72 years in 2003 to 77.3 in 2020).³ The Healthy China 2030 plan, announced in 2016, identifies health as a fundamental prerequisite for social and economic development.⁴ The Healthy China goals for 2030 are to increase life expectancy from 77 to 79 years, reduce child mortality from 9.5 to 6 per thousand live births, and reduce maternal mortality from 18 to 12 per 100,00 live births. It focuses on disease prevention as well as a holistic approach to well-being, with core indicators that include strengthening health security and improving health

¹ X. Li et al. 2020. [Quality of Primary Health Care in China: Challenges and Recommendations](#). *The Lancet*. 395 (10239), pp. 1802–1812.

² World Bank and WHO. 2019. [Healthy China: Deepening Health Reform in China: Building High-Quality and Value-Based Service Delivery](#). Washington, DC: World Bank.

³ W. Tao et al. 2020. [Towards Universal Health Coverage: Achievements and Challenges of 10 Years of Healthcare Reform in China](#). *BMJ Global Health*. 5 (3).

⁴ State Council of the PRC. 2016. [Outline of the Plan for Healthy China 2030](#). Beijing (in Chinese).

services.⁵ Healthy China 2030 is in line with the health reforms under the PRC's Fourteenth Five-Year Plan, 2021–2025, which prioritizes health system development, including reduction of disparities in health care and strengthening of health governance.⁶

5. **Public health system limitations.** While health system development has progressed, the PRC is now faced with increasingly complex health challenges. The COVID-19 pandemic has highlighted obstacles and development needs in the government-led public health system. The quality of service from health care providers is inadequate, and education and qualification levels among professionals in public health are low (footnote 1). The COVID-19 pandemic has shown that hospitals are particularly vulnerable to admission surges that negatively affect patient care and overburden facilities. Regional medical centers need to develop and implement emergency preparedness in accordance with WHO standards and conduct regular live simulation exercises to test their readiness for health emergencies, extreme weather events, and disasters.⁷ Additional challenges include gaps in legislative frameworks and fragmented public health systems with weak connections to regional and international disease reporting systems. Weak coordination among health institutions and inefficient referral systems hampers the ability to achieve integrated, cost-effective care to meet the goals of Healthy China 2030.

6. **Lessons from the coronavirus disease.** The rapid spread of COVID-19 in the PRC has underscored weaknesses in public health systems that prevent an effective response to large-scale health emergencies. Inadequate coordination between public health agencies, technology and equipment unsuited to rapid detection of infectious diseases,⁸ slow response and reporting, insufficient facilities for surge capacity, and limited core public health knowledge and skills highlight the PRC health system's inability to meet the challenges of future epidemics and hazards.⁹ Health workers in hospitals are particularly vulnerable to respiratory tract infections, with incidence rates of up to 60%.¹⁰ In its current state, the public health system's capacity to effectively prevent and contain future public health threats remains limited. Another key lesson from the COVID-19 pandemic is the need to avoid unnecessary referrals to hospitals by public health providers, which resulted in hospital overcrowding and inefficient use of medical resources. Gaps need to be addressed with respect to services, including in the areas of mental health; long-term care for the elderly, who are particularly vulnerable; and laboratory services.

7. In the long term, training of primary care and public health providers in regional medical centers will increase resilience and ensure effective response during health emergencies and infectious disease outbreaks, and will strengthen regional and international cooperation. The post-COVID-19 pandemic recovery period provides a valuable opportunity to strengthen the country's preparedness for emerging infectious diseases and other possible public health threats and apply best practices to better protect against future health hazards. This can be best achieved by using a multipronged approach that combines public health institutional capacity building that

⁵ Health security is defined as the proactive and reactive activities required to minimize the danger and impact of acute public health events that endanger people's health across geographical regions and international boundaries. WHO. [Health Security](#).

⁶ Government of the PRC. 2021. [The Outline of the Fourteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives Through the Year 2035](#). Beijing (in Chinese).

⁷ WHO. 2020. [Rapid Hospital Readiness Checklist: Interim Guidance](#). Geneva.

⁸ Y. Bai et al. 2020. [Analysis of Urinary Pathogen Cultures and Drug Sensitivity in Patients with Urinary Stones for Five Consecutive Years in Xiangya Hospital, China](#). *Infection and Drug Resistance*. 2020 (13). pp. 1357–1363.

⁹ S. Sun et al. 2021. [COVID-19 and Healthcare System in China: Challenges and Progression for a Sustainable Future](#). *Globalization and Health*. 17 (14).

¹⁰ P. Yang et al. 2011. [Mask-Wearing and Respiratory Infection in Healthcare Workers in Beijing, China](#). *The Brazilian Journal of Infectious Diseases*. 15 (2). pp. 102–108.

is aligned with current needs, policies and hardware that address their intended purpose, and world-class training capacity linked to international cooperation.

8. **Institutional approaches.** Assessments of the PRC’s public health system highlight the need for an impactful, multifaceted response to bolster health security. Gaps include weak links between responsible agencies, a lack of focus on primary care, lack of well-trained staff, outdated operational plans and response systems, and poor public health prevention and response systems (footnote 9). To address these gaps, the project will support the PRC through strategic investments in the key pillars of public health systems. These include development of public health institutional capacity and policies in line with international standards, upgrading of strategic public health emergency and training facilities with surge capacity, improvement of health workforce capabilities, and international knowledge exchange. The project will also introduce a mutually interdependent system, or “ecosystem,” of core public health functions that include laboratory diagnostic systems, tools for surveillance of infectious disease, upgraded health facilities, and programs to support long-term health and well-being for long-term resilience. Women make up the majority of frontline health care workers in the PRC, and are exposed to a higher risk of contracting some diseases, including respiratory infections (footnote 10). Women are underrepresented in management roles despite the large number working in the health workforce, which will be addressed by reducing barriers to women’s advancement in leadership roles and specialist training. In the context of the PRC’s status as an upper middle-income developing member country (DMC), a strategic and comprehensive approach is required to make a transformational impact on the public health system.

9. **Strategic alignment.** The PRC has an increasingly mobile and highly dense urban population, and plays a critical role in global health security. The growing international exchange of goods, services, and people poses increased risk of transmission of infectious diseases that can become major public health threats which requires strengthening of health systems; the government’s Healthy China 2030 plan (footnote 4) states that efforts to achieve this must include improved vertical and horizontal institutional coordination, investments in infrastructure and training of world-class health workers, institutional capacity building, stronger coordination, and policy reforms. The project will support the PRC in implementing (i) its Healthy China 2030 plan; (ii) its Fourteenth Five-Year Plan, 2021–2025 (footnote 6) by implementing health system strengthening; and (iii) the PRC’s priority tasks for health care reform in 2022 through integration of disease prevention with medical treatment.¹¹ The project is aligned with (i) Strategy 2030 operational priorities of the Asian Development Bank (ADB) on accelerating progress in gender equality; tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; strengthening governance and institutional capacity; and fostering regional cooperation and integration; as well as (ii) strategic priority 3 of ADB’s country partnership strategy for the PRC, 2021–2025, which aims to strengthen national and regional health security standards by building institutional capacity and coordination mechanisms to manage cross-border public health risks and improve health emergency preparedness and response.¹² It also supports the United Nations’ Sustainable Development Goal on promoting healthy lives and well-being. Regional cooperation and integration through the provision of regional public goods is a key feature of the project. This includes reducing the risks of rapid spread of infectious diseases across borders, providing regional knowledge transfer and cooperation, and alignment with regional strategies such as the Greater Mekong Subregion (GMS) Health Cooperation Strategy,

¹¹ State Council of the PRC. 2022. [China Lists Tasks for Health Care Reform in 2022](#). 25 May.

¹² ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila; and ADB. 2021. [Country Partnership Strategy: People’s Republic of China, 2021–2025—Toward High-Quality, Green Development](#). Manila.

2019–2023,¹³ through the project’s investments in GZAR, and support for cross-border disease surveillance and training for Vietnamese health workers (para. 16). Since 2011, ADB has supported GMS countries on regional initiatives for communicable disease control. Through the GMS program, ADB serves as a recognized facilitator of cross-border health programming. The GMS program provides a platform for dialogue on regional health issues, such as health security, migrant health, and other regional cooperation issues.

10. **Development partner coordination.** WHO has helped refine proposed activities and provided guidance with respect to adherence to international best practices and standards for pandemic preparedness and health security. The project supports a common framework to address health security threats among DMCs in the Asia and Pacific region through alignment with the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies through strengthened surveillance, risk assessments, and outbreak responses.¹⁴ The project is also coordinated with health sector support provided by other development partners such as the Asian Infrastructure Investment Bank, New Development Bank, and the World Bank. Sector support is coordinated through government dialogue with partners through the Ministry of Finance and at local levels.

B. Project Description

11. The project is aligned with the following impacts: (i) health and well-being of residents protected, promoted, and restored (footnote 4); (ii) capacity for early warning, risk reduction, and management of health security risks strengthened;¹⁵ and (iii) prevention and control of major communicable diseases strengthened (footnotes 4 and 6). The project will have the following outcome: quality of public health services improved.¹⁶

12. **Output 1: Public health institutional capacity and policies developed.** This output includes the following activities in the three project sites in GZAR, Guizhou Province, and Shaanxi Province:

- (i) **Emergency preparedness and contingency planning.** The project will (a) establish guidelines and standards that are of international standard for the advancement of disease control, infection prevention, laboratory biosecurity, risk communication, and community engagement; (b) conduct multidisciplinary capacity-building activities to allow coordinated responses to pandemics (footnote 7); and (c) conduct regular live outbreak simulation exercises to test readiness for health emergencies and disasters.
- (ii) **Capacity building of public health workforce.** The project will conduct training for primary care and public health providers to increase their efficiency and ability to deliver high-quality services during public health emergencies and infectious disease outbreaks.
- (iii) **Establishment of modern health management information systems.** The project will upgrade the smart public health information systems of participating hospitals to provide real-time disease surveillance with sex-disaggregated data to

¹³ ADB. 2019. [Greater Mekong Subregion Health Cooperation Strategy 2019–2023](#). Manila. The strategy provides a framework to tackle priority health issues including improved response to public health threats, health impacts of regional integration, and human resource capacity in the health sector. GZAR is included in the GMS program.

¹⁴ WHO. 2017. [Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies: Advancing Implementation of the International Health Regulations \(2005\)](#). Manila (WHO Regional Office for the Western Pacific).

¹⁵ Government of the PRC. 2016. [China’s National Plan on Implementation of the 2030 Agenda for Sustainable Development](#). Beijing.

¹⁶ The design and monitoring framework is in Appendix 1.

the government's system; benefits will include the technical exchange of information with other health facilities for rapid response.

13. **Output 2: Effective public health ecosystem established.** This output includes the following activities:

- (i) **Antimicrobial resistance surveillance system.** An antimicrobial resistance surveillance system will be established in each participating hospital to monitor the emergence of resistant strains of microorganisms to prevent infectious disease outbreaks.
- (ii) **Laboratory support for the detection of emerging infectious diseases.** High-quality laboratories with effective biosecurity measures that produce test results in a timely manner will be established in the participating hospitals to ensure effective clinical management of infectious disease cases.
- (iii) **Mental health and wellness programs.** To protect against the negative effects of public health hazards on mental health and well-being, particularly among the elderly and those with long-term diseases such as heart disease and diabetes, preventive health programs promoting healthy lifestyles will be established in the project sites.
- (iv) **Establishing and upgrading of hospital facilities.** One new health facility will be established in Guiyang, and existing facilities will be upgraded in the Fangchenggang and Yan'an project sites.¹⁷ State-of-the-art medical equipment will be installed, and support systems will be established, including women and child health facilities and accessibility facilities.

14. **Output 3: Training excellence and international cooperation capability enhanced.** This output includes:

- (i) **Training to promote gender equality.** The project will provide staff training on the provision of a secure environment for women to have full access to essential and respectful health care, including during health emergencies.
- (ii) **Regional knowledge cooperation.** The project will (a) establish an international cooperation platform in the participating hospitals for documentation and sharing of best practices and lessons among DMCs in the Asia and Pacific and beyond to improve evidence-based medical practice and gender-specific health issues (those that disproportionately or only affect women); (b) establish an international public health training facility at each project site; (c) facilitate national and international partnerships with academic and specialized agencies to strengthen public health professional education and establish quality standards; and (d) support the PRC's knowledge cooperation with other DMCs, including neighboring countries.

15. **Project sites.** The project sites are or will be located in (i) Fangchenggang City, GZAR; (ii) Guiyang City, Guizhou Province; and (iii) Yan'an City, Shaanxi Province. The provinces are among the most economically disadvantaged in the PRC (footnote 17). The project sites were selected by the government with reference to ensuring an equitable national geographic distribution and interventions that emphasize public health impact and affordable health care, development of institutional capacity, and international cooperation activities.

¹⁷ Gross regional product per capita ranking of the three provinces in 2020 are Shaanxi (12), Guizhou (28), and GZAR (29). Government of the PRC, National Bureau of Statistics. 2021. [China Statistical Yearbook 2021](#). Beijing (Table 3.9: Gross Regional Product, 2020).

- (i) **Fangchenggang Traditional Chinese Medicine Hospital.** This class III-A hospital was founded in 1981,¹⁸ and integrates scientific medical treatment, education, scientific research, and health care.¹⁹ The hospital provides comprehensive and integrated medical and health care services, with 592 open beds, 732 employees, and 606 health technicians. The hospital also provides traditional Chinese medicine services, but these are not supported through the project. In 2020, the bed utilization rate was 92.87%; given the increasing demand for medical services, it is projected that, by 2025, the daily outpatient visits and bed occupancy will show sharp increases requiring extension of the facilities.
- (ii) **Guiyang Traditional Chinese Medicine Hospital.** This planned class III hospital will serve the urban and rural areas of Guiyang City and nearby counties. The hospital will provide comprehensive health care services, including traditional Chinese medicine services, but the latter will not be supported through the project. It will provide services to nearly six million people in Guiyang City. About 800 new staff and manager posts will be recruited for the operation and maintenance (O&M) by the government.
- (iii) **Yan'an University Affiliated Hospital.** This large, comprehensive class III-A hospital with multiple specialties was founded in 1950; it provides health services to almost 21 million people in Yan'an City and its surrounding areas. The hospital is recognized as a national clinical teaching and training demonstration center and a practice teaching base of the Ministry of Education but does not provide international public health training. The hospital has a current total bed capacity of 1,900 with 3,633 staff.

C. Value Added by ADB

16. The project adds significant value in key areas that have been highlighted as gaps in pandemic response, such as in the (i) promotion of regional public goods and health security, (ii) strengthening of the public health workforce, and (iii) large-scale systematic institutional capacity improvement. The project aims to reduce pandemic-prone diseases that can rapidly cross borders, thereby providing international health benefits beyond the government's broader program, with positive effects on other sectors in the Asia and Pacific region (e.g., trade, tourism, and transport) by reducing the risk of pandemics. ADB's role as convener and honest broker through regional forums such as the GMS will enhance the project's benefits. The regional public health training facilities, particularly in GZAR, will enable health professionals from neighboring DMCs to learn from the PRC's experiences in pandemic response and help establish regional cooperation and training platforms for knowledge cooperation.²⁰ Although a robust strategy to strengthen health systems may be in place, implementation of public health programs relies on a highly trained public health workforce, which is currently a gap in the PRC (footnote 1). The project

¹⁸ Class I hospitals are primary hospitals that provide integrated medical, preventive, rehabilitation, and health care services directly to one defined community. Class II hospitals are regional hospitals that provide comprehensive medical and health services to multiple communities and undertake teaching and research tasks. Class III hospitals cover one or more provinces and provide high-level specialized medical and health services and perform higher teaching and research tasks across regions. Hospitals at all levels are assessed and certified to be grades A, B, and C considering the scale, technical level, medical equipment, management level, and medical service quality, with an additional A+ for Class III hospitals, for a total of three classes and 10 grades.

¹⁹ Although the participating project hospitals are called Fangchenggang Traditional Chinese Medicine Hospital and Guiyang Traditional Chinese Medicine Hospital, the project supports the western medicine model of health security interventions. Both western medicine and traditional Chinese medicine are practiced at all levels of the health system in the PRC. Traditional Chinese medicine activities will not be supported under the project.

²⁰ In Fangchenggang, GZAR, the project is establishing an Association of Southeast Asian Nations Training Base as an international center of public health training excellence.

supports capacity building of an adaptable health workforce, trained in accordance with international standards, to respond to future health security threats, as well as those brought about by aging and noncommunicable diseases. The COVID-19 pandemic demonstrated the need to promote system-wide institutional interventions that emphasize good governance, risk communication, and adherence to WHO standards of emergency and pandemic planning, with modern gender-sensitive surveillance and information technology systems. The project incorporates lessons from ADB's PRC elderly care projects that promote seamless integration and referral of services from hospitals to community-level health facilities, coupled with longer-term preventive care and health promotion activities.²¹ The project specifically aims to accelerate progress in gender equality.

D. Summary Cost Estimates and Financing Plan

17. The project is estimated to cost €633.55 million (Table 1). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).²²

Table 1: Summary Cost Estimates
(€ million)

Item	Amount ^a
A. Base Cost^b	
1. Output 1: Public health institutional capacity and policies developed	49.87
2. Output 2: Effective public health ecosystem established	454.48
3. Output 3: Training excellence and international cooperation capability enhanced	57.30
Subtotal (A)	561.65
B. Contingencies^c	58.19
C. Financial Charges During Implementation^d	13.71
Total (A+B+C)	633.55

^a Includes taxes and duties of €42.75 million, of which €22.44 million will be financed by the government and €20.31 million by the Asian Development Bank loan. Such amount does not represent an excessive share of the project cost.

^b In 2022 prices (as of 20 May 2022).

^c Physical and price contingencies, and a provision for exchange rate fluctuation are included.

^d Includes interest, commitment, and other charges on all sources of financing.

Source: Asian Development Bank estimates.

18. The government has requested a regular loan of €300,993,000²³ (\$300,000,000 equivalent) from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 5 years; an interest rate determined in accordance with ADB's Flexible Loan Product; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 15.25 years, and the maturity premium payable to ADB is 0.30% per year. The government will make the proceeds of the ADB loan available, through Guangxi Zhuang Autonomous Region Government (GZARG), Guizhou Provincial Government (GPG), Shaanxi Provincial People's Government (SPPG), and the executing agencies, to the implementing agencies as follows: (i) GZARG to Fangchenggang Municipal People's Government

²¹ ADB. [People's Republic of China: Hebei Elderly Care Development Project](#); ADB. [People's Republic of China: Hubei Yichang Comprehensive Elderly Care Demonstration Project](#); ADB. [People's Republic of China: Public-Private Partnerships Demonstration Program to Transform Delivery of Elderly Care Services in Yichang, Hubei Project](#); ADB. [People's Republic of China: Demonstration of Guangxi Elderly Care and Health Care Integration and Public-Private Partnership Project](#); and ADB. [People's Republic of China: Public Service Sector Public-Private Partnership Promotion and Elderly Care Demonstration Project](#).

²² PAM (accessible from the list of linked documents in Appendix 2).

²³ The applicable conversion rate is €1.003311 = \$1.00 (as of 25 August 2022).

(FMPG), and FMPG to Fangchenggang City Culture and Tourism Group Co., Ltd (FCTG), €70,232,000 as a loan and €16,494,000 as a grant; (ii) GPG to Guiyang Municipal People's Government (GMPG), €97,321,000 as a loan, to be utilized by Guiyang Bureau of Health (GBH) and repaid by GMPG; and GPG to GMPG, and GMPG to GBH, €5,909,000 as a grant; (iii) SPPG to Yan'an University Affiliated Hospital (YUAH), €80,265,000 as a loan; and €12,913,000 as a grant; (iv) GZARG to National Institute of Hospital Administration (NIHA), €3,572,000 as a grant; (v) GPG to NIHA, €7,133,000 as a grant; and (vi) SPPG to NIHA, €7,154,000 as a grant, on terms and conditions that are acceptable to ADB, including commitment charge, interest rate, repayment period, and a grace period identical to those applied to the loan. FCTG, GMPG, and YUAH will bear the foreign exchange and interest rate variation risks relating to their respective portion of the loan proceeds.

19. The summary financing plan is in Table 2. ADB will finance the expenditures in relation to civil works, goods, and consulting services for capacity development and project management support. The government has given its assurance to provide counterpart funding in a timely manner and will provide any additional counterpart funding needed to cover shortfall of funds or cost overruns.

Table 2: Summary Financing Plan

Source	Amount (€ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan) ^a	300.99	47.51
Government	332.56	52.49
Total	633.55	100.00

^a The government will use €53,175,000 of the €300,993,000 loan as grant provision to the Fangchenggang City Culture and Tourism Group Co., Ltd. (€16,494,000); Guiyang Bureau of Health (€5,909,000); Yan'an University Affiliated Hospital (€12,913,000), and National Institute of Hospital Administration (€17,859,000).

Source: Asian Development Bank estimates.

20. Climate mitigation is estimated to cost €1.81 million and climate adaptation is estimated to cost €4.01 million. ADB will finance 47.51% of mitigation costs and 47.51% of adaptation costs. Details are in the climate change assessment.²⁴

E. Implementation Arrangements

21. The National Development and Reform Commission will act as the lead coordinating and supervising agency for the project. As a lead agency involved in post-COVID-19 recovery, it will assist in project monitoring and supervision in collaboration with respective provincial development and reform commissions.

22. The project has three executing agencies: FMPG, GMPG, and SPPG. Each executing agency has established a project leading group, led by a vice mayor and with key members from the municipal or provincial development and reform commissions, finance bureaus, health commissions, and other municipal or provincial bureaus. The project has four implementing agencies. The three implementing agencies (the FCTG, GBH, and YUAH) have each established a project management office, which will be responsible for day-to-day project implementation, including safeguards; financial reporting; monitoring and evaluation; and procurement of civil works, goods, and consulting services. NIHA, as the fourth implementing agency, will coordinate the work of the three project sites and carry out capacity-building and research activities. All

²⁴ Climate Change Assessment (accessible from the list of linked documents in Appendix 2).

implementing agencies will follow the ADB Procurement Policy (2017, as amended from time to time) and the Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

23. Implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 22).

Table 3: Indicative Implementation Arrangements

Aspects	Arrangements		
Implementation period	November 2022–December 2027		
Estimated completion date	30 June 2027		
Estimated loan closing date	31 December 2027		
Management			
(i) Executing agencies	(i) Fangchenggang Municipal People's Government, (ii) Guiyang Municipal People's Government, and (iii) Shaanxi Provincial People's Government		
(ii) Key implementing agencies	(i) Fangchenggang City Culture and Tourism Group Co. Ltd., (ii) Guiyang Bureau of Health, (iii) Yan'an University Affiliated Hospital, and (iv) National Institute of Hospital Administration		
Procurement	Open competitive bidding (internationally advertised)	2 contracts (goods)	€18.36 million
	Open competitive bidding (nationally advertised)	40 contracts (works, goods, and IT products and services)	€393.09 million
	Request for quotations	7 contracts	€1.10 million
Consulting services	QCBS	6 contracts	€13.94 million
	CQS	13 contracts	€3.91 million
	ICS	12 contracts	€0.70 million
Retroactive financing and/or advance contracting	Advance contracting includes one consulting service package with estimated value of \$2.5 million and two request for quotations goods packages with estimated value of \$0.2 million. Retroactive financing of up to 20% of the ADB loan amount will apply to expenditures incurred before loan effectiveness, but not earlier than 12 months prior to signing of the loan agreement.		
Disbursement	Disbursement of the loan proceeds will follow ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, CQS = consultants' qualifications selection, ICS = individual consultant selection, IT = information technology, QCBS = quality- and cost-based selection.

Source: ADB.

III. DUE DILIGENCE

A. Technical

24. The project was determined to be technically feasible based on its compatibility with local conditions and careful consideration of local capacity for implementation, operations and maintenance. The architectural design of the hospital facilities will comply with international and national standards and good practices. Low-carbon and resource-efficient measures, including hot water systems, intelligent lighting control, and passive energy-saving designs will be adopted. Health facility design specialists will review the preliminary and detailed designs to ensure compliance with international and national standards.

B. Economic and Financial Viability

25. **Economic.** The ADB investment will enable greater access to public health facilities and services, enhance health security emergency preparedness, reduce child and maternal mortality, and generally improve health outcomes and life expectancy for an estimated 9.4 million city residents and many of the 130 million people at the provincial level in the project sites. The project

cost–benefit analysis was carried out under the assumption that the project interventions will contribute to averting disability-adjusted life years by 80% over the course of 20 years for 20 major disease categories for which treatment is offered by the newly established hospitals. The annual estimated number of hospital inpatients and outpatients and the WHO Global Health Estimates by Burden of Disease country data for the PRC were used,²⁵ with per capita gross regional product data applied to monetize the project’s economic benefits. Data for years of life lost because of premature mortality per 100,000 population in the PRC indicates that life loss in Guangxi is 8% higher than the national PRC average, while Guizhou is 10% higher, and Shaanxi 1.2% lower.²⁶ These percentages have been applied to the project sites’ disability-adjusted life years to reflect the prevailing health environment in each province compared to the national average. The project has been assessed as economically viable with an economic internal rate of return (EIRR) of 7.3% and an economic net present value of \$59.66 million at a discount rate of 6%. Of the three sensitivity scenarios modelled, a 10% reduction in project costs returned an EIRR of 11.4%, while a hybrid scenario of a 10% reduction in costs and a 10% reduction in benefits had an EIRR of 7.3%, both above the ADB threshold of 6%. The scenario of a 10% reduction in benefits returned an EIRR of 2.5%.

26. **Financial.** The project involves the construction and/or rehabilitation and operation of public health care facilities and hospitals in the cities of Fangchenggang, Guiyang, and Yan’an. The hospitals are nonprofit institutions and the revenues earned from health services offered are based on medical fees and charges designed to cover only O&M costs, except for Yan’an, whose facility, the YUAH, would repay the loan. Financial viability analysis was prepared for all three project sites and the results show that all the financial internal rates of return exceeded the weighted average cost of capital of 0.21%. To ensure sustainability at all three sites, funding gaps resulting from potential changes in cost estimates will be subsidized by the respective municipal or provincial finance bureau.

C. Sustainability

27. A fiscal sustainability analysis of incremental O&M expenditures was conducted. The review of historical and current budgetary measures of the FCTG, GBH, and Shaanxi Finance Department (for Yan’an City) shows insufficient provisions in their respective expenditure budget to support current and projected O&M requirements of the existing network and project facilities. There is low incentive for the agencies to increase budget spending given little or no improvement in the current state of health care and medical infrastructure and systems, but this situation will change when the project is implemented. The fiscal sustainability analysis indicates the incremental costs of the project outputs would be financed through increased annual O&M budget allocations by the respective governments for their overall public health care networks. The executing agencies, together with the FCTG, GBH, and Shaanxi Finance Department, have indicated their willingness to provide the required project O&M budget funds to ensure project sustainability, and agreed to incorporate such support for the project in the loan assurances. Project-related assets, including funds for training and capacity development (i.e., in the management of epidemics, natural calamities and disasters, and other health hazards) of existing and future hospital health care practitioners would be covered in the budget appropriations to deliver expected benefits and enhance service delivery.²⁷

²⁵ WHO. 2019. [WHO Global Health Estimates: Disease Burden, China, 2019](#).

²⁶ M. Zhou et al. 2019. [Mortality, Morbidity, and Risk Factors in China and its Provinces, 1990–2017: A Systematic Analysis for the Global Burden of Disease Study 2017](#). *The Lancet*. 394 (10204). pp. 1145–1158.

²⁷ The fiscal sustainability analysis indicates that the current annual expenditure budget in the three sites averages 8%–10% of gross regional product. With the implementation of the project, the budget requirement would increase by 10%–15%.

D. Governance

28. **Financial management assessment.** The financial management assessment of the overall project was based on the capacity of the executing and implementing agencies. The assessed pre-mitigation financial management risk is *substantial*. The key findings and risks associated with executing and implementing agencies' financial management capability were identified and appropriate risk mitigation measures are described in the PAM (footnote 22) and will be closely monitored during project implementation.

29. **Procurement risk assessment.** Value for money will be achieved through contract packaging, selection of procurement methods and bidding procedures, and the proposed advance procurement arrangement. The arrangement resulted from a strategic procurement planning exercise that considered the strategic project priorities, risks and opportunities, executing and implementing agencies' procurement capacities, and operating and market conditions. The overall project procurement risk is *moderate* and can be considered *low* after mitigation measures are undertaken. Measures to mitigate the risks are in the risk assessment and risk management plan.²⁸

30. **Health facilities and equipment risk assessment.** The feasibility study reports prepared by Fangchenggang, Guiyang, and Yan'an were reviewed by ADB according to the health sector best practices and the ADB health impact assessment sourcebook.²⁹ The proposals are in line with ADB's country partnership strategy for the PRC, 2021–2025 on regional health security (footnote 12) and the project scope, which includes ensuring social inclusion and health security; providing healthy aging and improving public health care; and enhancing the development of knowledge, skills, commitment, structures, systems, and leadership to enable effective public health care.

31. The project health facilities and equipment technical risk was rated *high* for all project sites because the executing and implementing agencies lack the required ADB project experience, and their personnel will need to be acquainted with ADB's relevant policies. The executing and implementing agencies also have limited experience in implementing projects funded by other multilateral development institutions. These risks will be mitigated through activities outlined in the PAM (footnote 22).

32. ADB conducted integrity due diligence on FCTG and YUAH, and its board of directors, supervisors, and key senior management members.³⁰ They do not appear to constitute a significant or potentially significant integrity risk. ADB has confirmed that they do not pose potential risks relating to money laundering or terrorism financing in the project jurisdiction.

33. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the executing and implementing agencies. The specific policy requirements and supplementary measures are described in the PAM (footnote 22).

²⁸ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

²⁹ ADB. 2018. [Health Impact Assessment: A Good Practice Sourcebook](#). Manila.

³⁰ ADB. 2003. [Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism](#). Manila.

E. Poverty, Social, and Gender

34. In 2021, Guizhou ranked 22nd out of 31 provinces in terms of GDP per capita, while Guangxi ranked 19th, and Shaanxi ranked 14th.³¹ As of 2020, Guizhou had the lowest per capita disposable income of the three project provinces at CNY23,996.2, which is over CNY10,000 lower than the national average of CNY35,128. Per capita disposable incomes in Guangxi (CNY26,726.7) and Shaanxi (CNY28,568) provinces are also lower than the national average.³²

35. There are no expected risks related to human trafficking as a result of the project and the project's focus on infectious disease may have a positive impact on reducing HIV/AIDS rates in the population of the three provinces. Surveys, focus group discussions, and key informant interviews were undertaken to identify any further risks and impacts, such as harassment or affordability concerns regarding the project sites. The results of these consultations are included in the poverty and social assessment and other relevant documentation.

36. The project intends to improve health care facilities, procure new medical equipment, and increase the number of beds available, which will directly benefit the people living in the project sites. The implementation of knowledge management activities in the participating hospitals and training of staff will increase the capacity in these participating hospitals and across the PRC. Additionally, training will be provided to the general public by health workers, which will particularly target the elderly, women, and vulnerable populations, and will increase the local population's understanding of disease symptoms, prevention, and treatment.

37. **Gender.** The PRC has seen ongoing improvement in women's health and education levels since 2011, in part as a result of the program for the development of Chinese women.³³ The average life expectancy of women now exceeds 80 years, placing the PRC 62nd among 184 countries and 4 years longer than the world average. However, issues persist, including unequal employment opportunities, particularly at the management level, and unequal incomes and participation in decision-making. Inadequate research on gender impacts during the COVID-19 pandemic affected the design of effective prevention and recovery.³⁴

38. The project is classified as *gender equity* and a gender action plan has been prepared.³⁵ Tangible benefits for women will result from the collection, analysis, and real-time transmission of sex-disaggregated data on emerging infectious diseases; an enhanced health security emergency response strategy and operational plan, including a section on supporting women and children; and gender equity policies at the participating hospitals that incorporate gender-sensitive clinical protocols.³⁶ The Yan'an location includes the construction of a YUAH branch for women and children, the Fangchenggang location will include services for women and children, and the Guiyang location will include a maternal health center. New construction in each of the three project sites will provide direct benefits for women in their respective districts and will include facilities to meet the needs of children and the elderly, and include accessibility features. Training and employment targets for all project sites will encourage increased participation by women in

³¹ Q. Zhou. 2022. [China's Most Productive Provinces and Cities as per 2021 GDP Statistics](#). *China Briefing*.

³² Government of the PRC, National Bureau of Statistics. 2021. [China Statistical Yearbook 2021](#). Beijing.

³³ Government of the PRC, National Bureau of Statistics. 2021. [Final Statistical Monitoring Report on the Implementation of China National Program for Women's Development \(2011–2020\)](#). Beijing.

³⁴ H. Feng et al. 2022. [COVID-19, Sex, and Gender in China: A Scoping Review](#). *Globalization and Health*. 18 (9).

³⁵ Gender Action Plan (accessible from the list of linked documents in Appendix 2).

³⁶ This involves providing guidelines for doctors and nurses to treat diseases or health issues in a way that ensures women's concerns, sensitivities, and risks are adequately addressed.

project implementation. Additionally, health and sanitation training will be provided to the general public, with specific targets for the elderly, women, and vulnerable populations.

F. Safeguards

39. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.³⁷

40. **Environment (category B).** The project team undertook due diligence and a consolidated initial environmental examination, including an environmental management plan (EMP), has been prepared. The domestic environmental assessment documents have been prepared and will be submitted by the executing agencies to the ecology and environment bureaus of the project cities, and are expected to be approved by the end of 2022. The initial environmental examination was disclosed in May 2022 on the ADB website and, together with the EMP, will be updated during the detailed design phase, as required.

41. The anticipated construction impacts of the project health facilities, including noise, fugitive dust, demolition wastes, and risk to community and occupational health and safety, are localized, short-term, and can be readily managed or effectively mitigated through the application of good construction practices and measures identified in the EMP. During operation, the major negative environmental impacts are related to storage, transportation and disposal of medical waste, and treatment of medical wastewater. The medical waste will be disposed of by the existing medical waste treatment centers. Due diligence confirmed that these facilities are established and operated in accordance with the PRC's environmental regulations. Other environmental impacts are anticipated to be minor and will be addressed through conventional O&M practices, health and safety codes, and measures included in the operations aspects of the EMP. Potentially affected persons and stakeholders were consulted, and their concerns will be addressed through the implementation of EMP. Each project site will establish and maintain a project-specific grievance redress mechanism (GRM) to handle the environmental and social concerns. There will be three independent safeguard GRMs for environmental and social safeguards.

42. **Involuntary resettlement (category A).** A resettlement plan has been prepared for the Guiyang site. Land acquisition was initiated in 2019, affecting one village in the Zhuchang town of Guanshanhu district. A total of 198.61 *mu* of land has been acquired and acquisition of 5.42 *mu* of land is still pending.³⁸ There are 143 affected households (69 households affected only by land acquisition, 47 affected only by demolition of structures, and 27 affected by both land acquisition and demolition of structures), with 691 persons. The total number of affected persons is 865, including 6 self-employed businessmen (also included in households affected by land acquisition) and 174 workers affected by nonresidential house demolition. Of the 96 households affected by land acquisition, 94 have been paid. Of the 64 households affected by residential house demolition, 60 have signed demolition agreements; of the 6 households or entities affected by nonresidential house demolition, 3 have signed demolition agreements. The 174 workers affected by the project have found new jobs, including in Guiyang Southwest Trade City. All land acquisition and house demolition contracts have been signed, and compensation fees have been paid. Remaining land acquisition and resettlement activities are demolition of two enterprise structures and one residential house, livelihood restoration activities (continuing until 2024), and relocation (expected to continue until December 2023). Key information from the resettlement plan and on the project has been disclosed to affected households, and the project information

³⁷ ADB. 2009. [Safeguard Policy Statement](#). Manila.

³⁸ A *mu* is a Chinese unit of measurement (1 *mu* = 666.67 square meters).

booklet, including GRM, were distributed to affected households in June 2022. For the Fangchenggang and Yan’an sites, due diligence confirmed that there are no outstanding issues.

43. **Indigenous peoples (category B).** There is a significant ethnic minority population in the Fangchenggang site that will benefit from the project interventions. Fangchenggang City is a multiethnic community with 36 ethnic minority groups. The predominant ethnic groups include the Zhuang with a population of 355,041 (33.94%); the Yao with a population of 48,011 (4.59%); and the Jing with a population of 25,973 (2.48%); other ethnic groups combined make up the remaining 58.99%. Positive impacts include or stem from the construction and O&M phase employment generation; improved health care infrastructure; upskilled health workers; training provided to ethnic minority groups on health and wellness; personal health visits; and strengthened capacity for early warning, risk reduction, and management of national health risks. The program management office developed an ethnic minority development plan for the Fangchenggang site to ensure that ethnic minority communities can equally access and receive culturally appropriate benefits. The ethnic minority development plan has been endorsed and approved by the executing agencies, uploaded on the ADB website, and disclosed to affected communities.

44. At the Guiyang site, 5 ethnic minority households (4 from the Miao ethnic group and 1 from the Buyi ethnic group) with 15 persons are affected by land acquisition and house demolition; none of the 5 households are affected differently by land acquisition, nor are they vulnerable households. Measures to address the resettlement impacts are included in the resettlement plan for the Guiyang site.

45. The project team prepared the resettlement plan and ethnic minority development plan in accordance with ADB’s Safeguard Policy Statement and the PRC’s laws and regulations. Implementation will be subject to internal and external monitoring. The project management offices will be supported by a resettlement specialist and an ethnic minority development specialist from the project implementation consulting team, who will also carry out capacity-building activities.

G. Summary of Risk Assessment and Risk Management Plan

46. The overall risk is rated *moderate*. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan (footnote 28).

Table 4: Summary of Risks and Mitigating Measures

Risk Description	Mitigation Measures
<p>Financial. The Ministry of Finance reduces on-grant financing to the executing agencies because of different priorities.</p> <p>Staff of the implementing agencies have no experience in the implementation of development partner projects and are unfamiliar with ADB’s financial management procedures.</p>	<p>The executing agencies will prepare robust financial evaluation reports and proposals setting out how the Ministry of Finance’s on-grant financing will be used. The PRC’s Fourteenth Five-Year Plan and the Healthy China 2030 plan will be used to provide the justification and business case for the on-grant financing.^a</p> <p>ADB, project management offices, and the loan implementation consultants will conduct training (on ADB financial management and procedures, including disbursement, accounting, auditing, and reporting for executing and implementing agency staff); a financial management manual will be developed by the loan implementation consultants; and an experienced financial expert will be recruited by the project management offices to enhance operational capacity.</p>
<p>The existing hospitals and health centers under the implementing agencies fail to</p>	<p>The proposed construction and/or rehabilitation of hospital and health care centers, and the training and capacity building activities</p>

Risk Description	Mitigation Measures
meet network O&M requirements because of the poor condition of facilities and equipment and limited staff capability to handle emergencies, including COVID-19.	included for the three project sites will enhance operations and service delivery. The executing and implementing agencies have committed to providing the O&M funding required on a timely basis to ensure project and existing network sustainability. Expenditure budgets will include funds for training and capacity building activities.
Technical. The executing and implementing agencies have insufficient qualified staff to efficiently plan, design, construct, install equipment, operationalize the facilities, and undertake the required activities to implement the project.	The executing and implementing agencies will engage sufficient experienced staff and loan implementation consultants to successfully perform health facility needs assessments and implement the project to avoid design changes, cost increases, quality failures, and delays. The project management offices will be supported by construction experts from other city and provincial government agencies.
Suboptimal facility design.	The executing and implementing agencies will undertake the facilities needs assessment with qualified staff. Following completion of the assessment, the schematic designs will be finalized, including for departments; services; units and rooms; medical equipment; management information system or hospital information system; heating, ventilation, and air conditioning; and utilities, engineering, and other works. This will ensure the smooth integration of specifications of the major medical equipment into the health facility design and construction planning.
Procurement. Change in scope of civil works.	The executing and implementing agencies will ensure specifications are well-defined and project planning is detailed, and secure advance approvals from all relevant authorities.

ADB = Asian Development Bank, COVID-19 = coronavirus disease, O&M = operation and maintenance, PRC = People's Republic of China.

^a Government of the PRC. 2021. [The Outline of the Fourteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives Through the Year 2035](#). Beijing (in Chinese); and State Council of the PRC. 2016. [Outline of the Plan for Healthy China 2030](#). Beijing (in Chinese).

Source: ADB.

IV. ASSURANCES

47. The government, FMPG, GMPG, and SPPG have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and loan documents.

48. The government, FMPG, GMPG, and SPPG have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement and project agreement.

V. RECOMMENDATION

49. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of €300,993,000 to the People's Republic of China for the Strengthening Public Health Institutions Building Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's Flexible Loan Product; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Masatsugu Asakawa
President

14 September 2022

DESIGN AND MONITORING FRAMEWORK

Impacts the Project are Aligned with			
(i) Health and well-being of residents protected, promoted, and restored (Healthy China 2030) ^a (ii) Capacity for early warning, risk reduction, and management of health security risks strengthened (China's National Plan on Implementation of the 2030 Agenda for Sustainable Development) ^b (iii) Prevention and control of major communicable diseases strengthened (PRC's Fourteenth Five-Year Plan, 2021–2025; and Healthy China 2030) ^c			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
Outcome^d	By 2028:		
Quality of public health services improved	a. Quality of women's health services increased by 25% in the three project sites (2022 baseline: To be determined) ^e b. Gender-responsive emergency preparedness and response systems operationalized and fully compliant with World Health Organization standards in the three project sites (2022 baseline: 0) ^f	a.–b. Survey reports, and project quarterly and annual progress reports including gender reports	R: Change in government policy may reduce support to health security initiative
Outputs	By 2024:		
1. Public health institutional capacity and policies developed	1a. Project site hospitals' public health security emergency preparedness and response strategy and operational plan, including a section on supporting women and children, updated at the provincial level and shared at the national level (2022 baseline: Not updated) (OP 1.1.2; OP 6.2.1) By 2027: 1b. Interoperable smart public health information systems, including sex-disaggregated data and analysis, upgraded for rapid response (2022 baseline: Not upgraded) (OP 1.1.2; OP 6.2.1) 1c. At least one epidemic simulation exercise conducted per year (2022 baseline: 0)	1a.–c. Project quarterly and annual progress reports	R: Shift of priorities away from public health reform
2. Effective public health ecosystem established	By 2026: 2a. At least one health care facility established and two upgraded with essential features (including women and children health facilities, and accessibility facilities) (2022 baseline: 0) (OP 1.1.2; OP 2.4.2; OP 6.2.1) ^g 2b. At least three public health laboratories with biosafety measures established (2022 baseline: 0) (OP 1.1.2; OP 6.2.1) ^h 2c. Gender mainstreaming policy and guidelines developed and implemented at the project hospitals (2022 baseline: Not developed) (OP 2.3.2) ⁱ	2a.–b. Project quarterly and annual progress reports 2c. Gender policy accepted by ADB	A: Prioritization of public health facility development maintained A: International cooperation and knowledge exchange

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
3. Training excellence and international cooperation capability enhanced	<p>By 2027:</p> <p>3a. A regional coordinating mechanism established and piloted for sharing innovations in public health among developing member countries (2022 baseline: Not established) (OP 7.3.4)</p> <p>3b. At least 3,000 public health field staff (at least 65% women) trained and report improved knowledge and understanding of public health issues, including gendered impacts,^j and strengthening national health security (2022 baseline: 0) (OP 2.2, OP 6.1.1)</p> <p>3c. At least 1,000 public health staff from hospitals, primary health care facilities, and laboratories; and other allied public health staff (at least 50% women) trained in gender sensitivity and at least 50% self-report improved gender sensitivity in clinical practice and awareness of gender issues in public health (2022 baseline: 0)</p> <p>3d. At least 3,000 (1,000 per project site) people including rural, women, children, and elderly people provided with enhanced understanding and awareness on healthy lifestyles and preventing disease (2022 baseline: 0)</p>	<p>3a. Project quarterly and annual progress reports</p> <p>3b.–d. Project quarterly and annual progress reports; and training completion survey and training reports</p>	priority maintained
<p>Key Activities with Milestones</p> <p>1. Public health institutional capacity and policies developed</p> <p>1.1 Draft guidelines and standards for disease control and prevention, including infection prevention and control for health facilities and laboratory biosecurity (Q4 2022–Q2 2023).</p> <p>1.2 Provide technical advice and recommendations for the preparation of related policies and operational plans to strengthen health security (Q4 2022–Q1 2023).</p> <p>1.3 Formulate gender-responsive hospital emergency preparedness plans (Q4 2022).</p> <p>1.4 Conduct training and simulation exercises with different sectors for coordinated pandemic response (Q4 2022–Q3 2024).</p> <p>1.5 Consult with academics, specialized agencies, and other development partners on research partnerships and plans for the conduct of scientific research on priority public health issues (Q2 2023).</p> <p>1.6 Establish multisector collaboration mechanism (Q4 2024).</p> <p>1.7 Conduct research and finalize arrangements for publication (Q4 2022–Q2 2023).</p> <p>1.8 Consult with the private sector on potential partnerships and follow through with agreements (Q4 2022).</p> <p>2. Effective public health ecosystem established</p> <p>2.1 Prepare and finalize detailed engineering design and site preparation for the construction of public health facilities (Q4 2022–Q4 2023).</p> <p>2.2 Develop bidding documents, conduct tenders, and award contracts (Q4 2022–Q2 2023).</p> <p>2.3 Bid for construction works and procurement of public health equipment and other medical supplies (Q1 2023).</p> <p>2.4 Deliver and install medical equipment and other medical supplies to public health facilities (Q2 2023).</p> <p>2.5 Upgrade hospital laboratory facility and equipment (Q2 2023).</p> <p>2.6 Finalize operation and maintenance arrangements and turnover of constructed public health facilities (Q3 2023).</p>			

<p>2.7 Develop gender policy to include employment targets for women and clinical protocols review for gender equality (Q1 2023–Q4 2023).</p> <p>2.8 Pilot innovative technology for emergency response in project provinces (Q3 2023–Q4 2024).</p> <p>2.9 Develop modernized guidelines for the operation of public health facilities (Q1 2023–Q4 2024).</p> <p>3. Training excellence and international cooperation capability enhanced</p> <p>3.1 Consult with academics, specialized agencies, and other development partners on the development of sustainable capacity building training (e.g., One Health) for multisector staff (Q1 2023).</p> <p>3.2 Finalize training arrangements and conduct training programs, including at subnational level (Q4 2022–Q4 2024).</p> <p>3.3 Complete scientific research projects on public health (Q1 2025).</p> <p>3.4 Establish regional platform for knowledge sharing (Q1 2023).</p> <p>3.5 Implement health promotion discussions aimed at promoting healthy lifestyles and preventing disease (Q3 2023).</p> <p>3.6 Conduct annual consultations with consumer and women's groups (Q1 2023–Q4 2027).</p>
<p>Project Management Activities</p> <p>Establish project management offices and project implementation units in project areas (Q1 2023).</p> <p>Establish monitoring and evaluation system with the executing and implementing agencies to enable assessment of capacity for management of public health emergencies (Q2 2023).</p> <p>Implement the environmental management plan, resettlement plan, ethnic minority development plan, gender action plan, and participation plan; and monitor their implementation (Q4 2022–Q4 2027).</p> <p>Establish coordination arrangements with the executing and implementing agencies, including regular consultations to prevent implementation delays of any activity (Q2 2023).</p> <p>Periodically review financial and procurement management and promptly address any issue to avoid delays in the procurement of goods and services, and disbursements (Q3 2023–Q4 2027).</p> <p>Monitor project implementation, including data collection from project partners and stakeholders, to substantiate project progress reporting (Q3 2023–Q4 2027).</p> <p>Submit quarterly progress reports and annual reports (Q3 2023–Q4 2027).</p> <p>Submit semiannual monitoring and evaluation reports on the environmental management plan, resettlement plan, ethnic minority development plan, and gender action plan implementation (Q4 2022–Q4 2027).</p>
<p>Inputs</p> <p>ADB: €300.99 million (\$300.00 million equivalent) (ordinary capital resources loan)</p> <p>Government: €332.56 million (\$331.46 million equivalent)</p>

A = assumption, ADB = Asian Development Bank, OP = operational priority, PRC = People's Republic of China, Q = quarter, R = risk.

^a State Council of the PRC. 2016. [Outline of the Plan for Healthy China 2030](#). Beijing (in Chinese).

^b Government of the PRC. 2016. [China's National Plan on Implementation of the 2030 Agenda for Sustainable Development](#). Beijing.

^c Government of the PRC. 2021. [The Outline of the Fourteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives Through the Year 2035](#). Beijing (in Chinese); and footnote a.

^d Because of the project's demand-driven nature, it is not possible to set results targets before project approval that are more specific than those in the preliminary design and monitoring framework. Results for these indicators, and/or other relevant ones for which data are available, will be identified and reported at the transaction technical assistance midterm review.

^e The survey will be carried out within the first 6 months of project implementation to establish the baseline, and health service quality will be measured periodically. The design will ensure data is disaggregated by sex, age, and other social parity data points where possible; for the indicator, only female patient data will be used. The quality of women's health services will be measured through standard index-based metrics: (i) knowledge and responsiveness of health staff, (ii) length of hospital stay, (iii) modern and accessible facilities, and (iv) patient's perception of care. Survey implementation will be aided by innovative user-friendly communication tools such as emojis to enable easy and more inclusive patient participation.

^f World Health Organization. 2020. [Rapid Hospital Readiness Checklist: Interim Guidance](#). Geneva.

^g Facilities include health services such as maternal and reproductive health, and pediatric services. Accessibility emphasizes easy access for people with disabilities.

^h Biosafety refers to measures required in a laboratory setting to protect health workers and prevent microorganisms from entering the environment.

ⁱ This involves establishment of gender-sensitive clinical protocols, including guidelines for doctors and nurses to treat diseases or health issues in a way that ensures women's concerns, sensitivities, and risks are adequately addressed,

including gender-based violence and non-discrimination policies and legal requirements for domestic violence reporting.

- j These include differences in outcomes from illnesses and injury based on gender differences in biological and behavioral determinants of health and illness.

Contribution to Strategy 2030 Operational Priorities

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2). In addition to the OP indicators tagged in the design and monitoring framework, this operation will contribute results for

OP 1.1 People benefiting from improved health services, education services, or social protection (number)

OP 3.2.4 National and subnational disaster risk reduction and/or management plans supported in implementation (number)

OP 6.2 Entities with improved service delivery (number)

Source: ADB.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=54118-001-3>

1. Loan Agreement
2. Project Agreement
3. Sector Assessment (Summary): Health
4. Project Administration Manual
5. Financial Analysis
6. Economic Analysis
7. Summary Poverty Reduction and Social Strategy
8. Risk Assessment and Risk Management Plan
9. Contribution to Strategy 2030 Operational Priorities
10. Climate Change Assessment
11. Gender Action Plan
12. Draft Initial Environmental Examination
13. Resettlement Plan: Guiyang Traditional Chinese Medicine Service System Construction Project

Supplementary Documents

14. Health Facility and Equipment Planning and Management
15. Preliminary Analysis of Capacity Building Needs
16. Participation Plan
17. Draft Ethnic Minority Development Plan
18. Resettlement Due Diligence Report: Fangchenggang Subproject
19. Resettlement Due Diligence Report: Yan'an Subproject
20. Climate Risk and Vulnerability Assessment
21. Additional Information on Sector Assessment (Health)