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Report No: 47995-CN

#### PROJECT APPRAISAL DOCUMENT

#### ON A

#### PROPOSED LOAN

#### IN THE AMOUNT OF US\$ 84 MILLION

#### TO THE

#### PEOPLE'S REPUBLIC OF CHINA

#### FOR A

#### CHONGQING URBAN RURAL INTEGRATION PROJECT

May 5, 2010

China and Mongolia Sustainable Development Unit Sustainable Development Department East Asia and Pacific Region

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#### CURRENCY EQUIVALENTS

(Exchange Rate Effective January 10, 2010)

Currency Unit = Renminbi (RMB) RMB 6.8 = US\$1

#### FISCAL YEAR

January 1 – December 31

#### ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AUSAID	Australia's Aid Program
BCR	Benefit-cost ratio
CAS	Country Assistance Strategy
CBA	Cost-benefit analyses
CEA	Consolidated Environment Assessment
CFAA	Country Financial Accountability Assessment
CFB	Chongqing Finance Bureau
CHB	Chongqing Health Bureau
CHC	Community health centers
CHS	Community health stations
СМ	Chongqing Municipality
CMG	Chongqing Municipal Government
CMAO	Chongqing Municipal Audit Office
CNAO	Chongqing National Audit Office
CPMO	Chongqing Project Management Office
CQS	Section based on the consultants qualifications
CSCP	Chongqing Small Cities Infrastructure Improvement Project
CUEP	Chongqing Urban Environment Project
CURIP	Chongqing Urban Rural Integration Project
CHCs	Community health centers
DA	Designated Account
DRC	Design Review Consultant
DSE	Dam Safety Expert
EIA	Environmental Impact Assessment
EIRR	Economic internal rate of return
EMP	Environmental Management Plan
FIDIC	International Federation of Consulting Engineers
FLO	Foreign Loan Office
FMM	Financial Management Manual
FMS	Financial Management Specialist
FSR	Feasibility Study Reports
GDP	Gross Domestic Product

IBRD	International Bank for Reconstruction Development
IDA	International Development Association
ICB	International Competitive Bidding
IC	Selection of Individual Consultant
ISR	Implementation Status Report
IST	Institutional Strengthening and Training
JBIC	Japan Bank for International Cooperation
MA	Medical Assistance
MBD	Model Bidding Document
MEP	Ministry of Environmental Protection
MoF	Ministry of Finance
M&E	Monitor & Evaluation
MP	Master Plan
NBF	Non-Bank Finance
NCB	National Competitive Bidding
NCDs	Non-communicable diseases
NCDP	New Countryside Development Program
NDRC	National Development and Reform Commission
NGOs	Non-Government Organizations
NS	National Shopping
NCMS	New Cooperative Medical Scheme
NPV	Net present value
O&M	Operation & Maintenance
QBS	Quality-based Selection
QCBS	Quality- & Cost-based Selection
SOE	State Owned Enterprises
PCAR	Procurement Capacity Assessment Report
PMO	Project Management Office
PIU	Project Implementing Unit
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SBD	Standard Bidding Document
SLA	Subsidiary Loan Agreement
SSS	Single-Source Selection
THCs	Township health centers
WTP	Willingness-to-pay

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-	Vijay Jagannathan, EASIN
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# CHINA

# CHONGQING URBAN RURAL INTEGRATION PROJECT

# CONTENTS

A.	STRATEGIC CONTEXT AND RATIONALE1
1.	Country and sector issues
2	. Rationale for Bank involvement
3	. Higher level objectives to which the project contributes
B.	PROJECT DESCRIPTION
1.	. Lending instrument
2	Project development objective and key indicators
3	Project components
4	Lessons learned and reflected in the project design
5	Alternatives considered and reasons for rejection
C.	IMPLEMENTATION
1.	Partnership arrangements (if applicable)
2	Institutional and implementation arrangements
3	Monitoring and evaluation of outcomes/results
4	. Sustainability
5	Critical risks and possible controversial aspects
6	Loan/credit conditions and covenants
D.	APPRAISAL SUMMARY 11
1	Economic and financial analyses 11
2	Technical
3	. Fiduciary
4	. Social
5	Environment
6	Safeguard policies
7.	Policy Exceptions and Readiness

Annex 1: Country and Sector or Program Background	18
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies	21
Annex 3: Results Framework and Monitoring	23
Annex 4: Detailed Project Description	28
Annex 5: Project Costs	28
Annex 6: Implementation Arrangements	34
Annex 7: Financial Management and Disbursement Arrangements	40
Annex 8: Procurement Arrangements	48
Annex 9: Economic and Financial Analysis	58
Annex 10: Safeguard Policy Issues	82
Annex 11: Project Preparation and Supervision	89
Annex 12: Documents in the Project File	91
Annex 13: Statement of Loans and Credits	92
Annex 14: Country at a Glance	96
Annex 15: Map IBRD 37535	98

#### CHINA

# CHONGQING URBAN RURAL INTEGRATION PROJECT

#### PROJECT APPRAISAL DOCUMENT

#### EAST ASIA AND PACIFIC

#### EASCS

Date: May 5, 2010	Team Leader: Paul Kriss
Country Director: Klaus Rohland	Sectors: General water and sanitation (11%);
Sector Manager/Director: Ede Ijjasz, EASCS;	Roads and Highways (56%); Vocational
Vijay Jagannathan, EASIN	training (7%); and Health (23%)
	Themes: Water resource management
	(P);Rural services and infrastructure (S);Other
	rural development (S)
Project ID: P086446	Environmental screening category: Full
	Assessment
Lending Instrument: Specific Investment Loan	Safeguard screening category: Limited impact

Project Financing Data					
[X] Loan [] Credit [] Grant [] Gua	arantee [] Othe	er:			
For Loans/Credits/Others:					
Total Bank financing (US\$m.): 84.00					
Proposed terms: A single currency, variable	e spread loan, with	a maturity of 25 ye	ears, including		
an 6-year grace period, and a front-end fee o	f 0.25%.				
Financi	ng Plan (US\$m)				
Source	Local	Foreign	Total		
BORROWER	87.96	18.20	106.16		
INTERNATIONAL BANK FOR	70.00	14.00	84.00		
RECONSTRUCTION AND					
DEVELOPMENT					
Total: 157.96 32.20 190.16					
Borrower: PEOPLE'S REPUBLIC OF CHINA					
Responsible Agency: Chongqing Project Management Office					
Contact Person: Mr. Zhou Linjun, Director; Chongqing Municipal Management Office of the					

World Bank's Capital Utilization, 14/F Sun of Asia Mansion, 248 Renmin Road, Chongqing, 400015, People's Republic of China.

Tel: 86-23-63877677; Fax: 86-23-63877822; E-mail: cmgpmo@public.cta.cq.cn

Estimated disbursements (Bank FY/US\$m)									
FY	10	11	12	13	14	15	16	17	
Annual	1.0	4.0	10.0	15.0	15.0	20.0	15	4	
Cumulative	1.0	5.0	15.0	30.0	45.0	65.0	80.0	84.0	
Project implementation period: Start: May 1, 2010 End: December 31, 2015									
Expected effectiveness date: August 1, 2010									
Expected closing date: June 30, 2016									
Does the project depart from the CAS in content or other significant respects? []Yes [X]No									

Ref. PAD A.3	
Does the project require any exceptions from Bank policies?	
Translation Waiver: In accordance with the revised guidelines on English	[X]Yes [] No
translation waiver (March 2008), it was agreed by the EAP Safeguards	
Secretariat that the Environmental Impact Assessment (EIA) prepared for each	
project component and an associated environmental management plan (EMP)	
developed for each project component will be in Chinese language. By the	
same token, the six individual RAPs (or/and Abbreviated RAPs) prepared by	
PIUs for six separate components will be in Chinese Language. The	
Consolidated Environment Assessment (CEA) Report and the Consolidated	
RAP have been translated into English for review and approval by the Bank.	
The English language CEA Report and the Consolidated RAP have been	
disclosed through the Bank's Infoshop.	
Ref. PAD D.7	
Have these been approved by Bank management?	[ ]Yes [X] No
Is approval for any policy exception sought from the Board?	[ ]Yes [X] No
Does the project include any critical risks rated "substantial" or "high"?	[X]Yes [] No
Ref. PAD C.5	
Does the project meet the Regional criteria for readiness for implementation?	
Ref. PAD D.7	[X]Yes [] No

# Project development objective Ref. PAD B.2, Technical Annex 3

The project development objective is to assist Chongqing Municipality in increasing access of residents in selected counties and districts to improved public services, including roads, water supply, employment training, and primary health care.

Project description [one-sentence summary of each component] Ref. PAD B.3.a, Technical Annex 4

#### **Component 1 – Roads and Water Supply**

Building and developing transportation and water supply networks in the following jurisdictions to increase or provide access to other geographical areas and safe drinking water:

- (a) Construction of roads and related transport infrastructure in Banan District, Tongliang County, Xiushan County and Yongchuan District; and
- (b) Construction of water supply infrastructure in Fengjie County, Shizhu County, and Xiushan County.

# **Component 2 - Township and Village Infrastructure**

Building and improving basic public service infrastructure in Qijiang County, Wanzhou District and Chengkou County including, inter alia, in such infrastructure construction of roads, service centers, water and waste water facilities, distribution pipes, and garbage collection stations and points, all with a view to improve or increase access to public services.

# **Component 3 - Migrant Workers' Training for Transfer and Employment**

Expanding access and improving quality of training for rural migrants to enhance their employability by, *inter alia*, carrying out the following in Selected Education Institutions:

- (a) Workshops and consulting services to strengthen school-industry linkage;
- (b) Providing equipment and upgrading buildings and workshops to facilitate delivery of training programs;
- (c) Updating curricula and training materials to increase the quality and relevance of training;
- (d) Providing teacher training to improve the quality of instruction;
- (e) Designing new tests to improve the assessment of training;
- (f) Providing technical assistance for capacity building, monitoring and evaluation, tracer studies and employer surveys, all to improve overall school management.

# **Component 4 - Community Health Care Services**

Improving access to, and enhancing quality of health care services in, rural and peri-urban areas of Chongqing as follows:

- (a) Equipping of village clinics and urban Community Health Care Centers by providing medical and other equipment and training required for the delivery of health care services; and
- (b) Expanding the Yubei District hospital by constructing the additional hospital facilities on a new site, and providing medical, and other equipment for such facilities and training required for health care services.

# **Component 5 - Institutional Support and Technical Assistance**

Facilitating Project implementation through the provision of consulting services to:

- (a) Enhance the design, review, and certification of works carried out under the Project;
- (b) Strengthen the capacity of the Project Implementation Entity (Chongqing) and county level in the areas of project management, procurement and contract management, accounting and financial management, and compliance with safeguard policies; and
- (c) Conduct policy study on O&M mechanism for public utilities in rural areas.

Which safeguard policies are triggered, if any? Ref. PAD D.6, Technical Annex 10

- Environmental Assessment
- Involuntary Resettlement
- Safety of Dams

Significant, non-standard conditions, **if any**, for: *Ref. PAD C.7* 

Negotiations and Board presentation: None

Loan effectiveness: None

Disbursement Condition:

(a) Signing of subsidiary loan or implementation agreements acceptable to IBRD between districts/counties and their implementing agencies.

Covenants applicable to project implementation:

- (a) Maintain the CPMO, and local government PIUs throughout implementation with qualified and adequate staff.
- (b) On-lending Bank loan proceeds on terms and conditions satisfactory to the Bank.
- (c) Provide, or cause to provide, adequate funding for counterpart requirements, debt repayments, and operations and maintenance.
- (d) Prior to delivery of equipment financed under the project to any community-based health care clinic, Chongqing shall provide to the Bank evidence that such a clinic has been upgraded or constructed to meet municipal standards for operation of such equipment.
- (e) Carry out a Mid-Term Review of Project implementation to make adjustments, as necessary, to achieve project objectives and to share experiences to-date and lessons learned with others.

# A. STRATEGIC CONTEXT AND RATIONALE

#### 1. Country and sector issues

1. China is experiencing rapid urban growth, with 46% of the population currently living in urban areas, up from 29% in 1995. By the year 2020, that trend is expected to continue with the urban population projected to reach 70%. This increase is a result of several factors, notably the government's decision to reduce controls governing population mobility and a falling demand for farm labor. Rapid urban growth is pressuring cities to expand their public infrastructure, increase municipal services and provide employment for migrants. To relieve some of these pressures, government policy is now focused on secondary cities and peri-urban areas, where the aim is to create conditions and facilities necessary to attract investments and to accommodate growing populations.

2. Since the mid 1990s China has been emphasizing development of its lagging Western and Central regions. Chongqing municipality is close to the geographical center of China. Its distance to China's eastern coast is around 1,400 km, and it is approximately 1,460 km to the southwest of Beijing and 1,100 km to the north west of Guangzhou. It is large and approximately 12 times as large as Shanghai, and about the same size as Austria, Azerbaijan, or Jordan. However, its territory is very rugged, consisting of folded mountains which are steep, and part of the basin formed by the Yangtze River and its tributaries. The city of Chongqing proper is situated at the intersection of the Yangtze and Jialing rivers, about 600 km upstream from the Three Gorges Dam. Chongqing is an industrial center based on "backbone" industries: namely, the automobile and motorcycle industry, the chemical and pharmaceutical industry, and the construction and building materials industry. It is also home to 34 institutions of higher education, although only one of them (Chongqing University) is included among the top 100 or so universities in China. Tourism has become an important industry for both Chongqing city and outlying areas, while agriculture is the main economic activity in the rural areas. With its large pool of low-cost labor, sufficient water and energy resources and well developed (river) transportation infrastructure, Chongqing has comparative advantage in attracting labor-intensive manufacturing relocating from the coastal regions of China and elsewhere.

3. Since its promotion to a municipality directly under national government administration in 1997, Chongqing's economy has grown rapidly. In per capita terms, Chongqing's real GDP grew at an average annual rate of 16 percent, which compares favorably with the aggregate Chinese economic growth rate of 12 percent. Despite its recent rapid relative growth, however, it remains in GDP per capita terms, very much a middle-ranking region at the province-level within China. Indeed, in 2007, 17 out of the other 30 province-level regions in mainland China had levels of GDP per capita in excess of Chongqing's; its GDP per capita was only 22 percent of Shanghai's and 25 percent of Beijing's.

4. Chongqing's resident population has remained relatively unchanged since 2000 at around 28.4 million.<sup>1</sup> Whereas in 2000, Chongqing's urban rate was 36 percent, by 2008 it had

<sup>&</sup>lt;sup>1</sup> Chongqing's registered population in 2008 stood at 32.57 million. The difference between the municipality's resident and registered population reflects the existence of workers who reside outside of the municipality, but who, because of the *hukou* system, continue to remain registered in Chongqing. Importantly, the *hukou* system provides

increased to 50 percent. This process has taken place fairly evenly across Chongqing's three major sub-regions. These sub-regions, which were introduced in 2007 and are an important focus in Chongqing's Master Plan (MP) for experimental reform, are the so-called "one hour economic circle" and the "two wings". Although Chongqing has been transformed from a primarily rural economy to one in which the population is more or less evenly split between urban and rural areas, there is a distinct core-periphery pattern to this split. Within this pattern, the one-hour circle represents the primarily urban core and the two wings the predominantly rural periphery.

5. Chongqing's 2008 GDP was RMB509.7 billion (US\$74.6 billion). In 2008, average disposable income per capita for urban households in Chongqing was RMB15,709 (US\$2,300), while average net income per capita for rural households was RMB4,126 (US\$603). Thus, average income per capita was almost 3.8 times higher in urban areas than in rural areas, indicating a very high level of disparity. In this respect, Chongqing's experience is typical of that of other province level regions within China which exhibit a similar level of development. The general approach being followed by Chongqing, with Bank support, is to promote long-term balanced urban-rural development by improving the functioning of the full portfolio of places (i.e., districts, counties, towns and villages). Past experience in developing countries, including China, has shown that such an approach will contribute to the building of economic density, which will drive aggregate increases in productivity, while, in the long-run, simultaneously reducing urban-rural disparities through the integration of peripheral agricultural areas.

6. Chongqing has begun to formulate policies for efficient rural-urban transformation that take into account the existing inter-linkages between different types of settlement in its jurisdiction. Such policies focus in the near and medium term on the provision of basic infrastructure and social services in lagging rural areas, and support rural transportation investments to better connect the rural areas with the urban centers. It has also begun to gradually relax its *hukou* (household registration) system towards achieving universal provision of basic services. The longer term aim is to remove barriers to labor mobility by allowing rural residents who migrate to urban areas for more productive employment to have access to basic services such as health care, education and social security.

7. The Chongqing Municipal Government (CMG) is committed to reducing the economic and social inequality between urban and rural areas. CMG adopted a Master Plan (MP) for an experimental reform in urban and rural areas in September 2007, after being selected by the Central Government as one of five pilot metropolitan regions. This Master Plan has two objectives: (a) increase Chongqing's urbanization rate from its current level of just under 50% to at least 55% by 2012 and 70% by 2020; and (b) reduce the ratio of urban to rural income per capita from 3.6:1 in 2007 to 3.15:1 by 2012 and 2.5:1 by 2020.

8. In the main city, infrastructure development is proceeding at a fast pace and the Bank has been engaged in these developments through the completed Chongqing Urban Environment Project (CUEP) which contributed to improving wastewater treatment and solid waste

an individual with rights to housing, education, food and social security only in the district in which they are registered. As such, there exist almost 4 million migrants from Chongqing living in other regions of China who are unable to claim these benefits.

management (two large treatment plants and a solid waste landfill were constructed) as well as other urban services. A follow up project, the Chongqing Small Cities Infrastructure Improvement Project (CSCP), approved in mid-2005, finances infrastructure development in several smaller districts and counties consisting of water supply schemes, river embankments for flood protection, and secondary roads. Infrastructure deficiencies, while diminishing, are still found in the smaller cities and towns. These have resulted in poor and intermittent supplies of drinking water, inadequate transportation networks, and poor connections between urban centers and the new expressways constructed. In addition, critical social services such as communitylevel health care facilities and vocational education programs for surplus farm laborers are woefully lacking in the rural and peri-urban areas.

9. There is significant difference and duality in the level of development of the health sector in urban, peri-urban, and rural areas in Chongqing, as in the rest of China. Disparity in health services are linked to gaps in facilities and staff, public health resource' allocation, and cost of service provision. Resources are disproportionately concentrated in urban areas and focused on less cost-effective tertiary hospitals. The government has recognized these problems and started to undertake reform. In March 2009, the Central Government started an unprecedented large-scale national health system reform with the ultimate goal of achieving universal coverage of basic health services, with a focus on improving rural health care services.

10. Demand for labor in Chongqing's key industries and the service sector is primarily in low-skill occupations. The biggest short-term challenges Chongqing faces are moderating the social consequences of returning migrants from China's key economic zones, facilitating the ongoing restructuring of employment, and balancing opportunities within the Municipality. Education and training will play a vital role in helping Chongqing confront these issues. Numerous municipal and county level institutions are providing vocational education training to migrant workers, but their effectiveness and efficiency are limited by: (a) the weak linkage between the training offered and the actual needs of employers; (b) lack of qualified instructors, and well-designed curricula; and (c) shortage of teaching materials, classrooms and equipment for worker training. Chongqing authorities are committed to tackling these shortcomings, and have set in motion plans to work more closely with the training institutes and the local employers to bring about reforms.

#### 2. Rationale for Bank involvement

11. The Bank and Chongqing municipality have worked successfully together over the past 15 years tackling urban environmental problems and improving living conditions in both the center city and in secondary cities and towns. The Bank supported several projects in Chongqing, which has proven to be a testing ground for new ideas and reforms that have been shared with other municipalities in China, especially in the lagging regions. The Municipality asked the Bank to support, through a series of possible new projects, its experimental reform program to reduce the inequality gap between urban and rural areas. The Bank is in an unique position to draw upon the framework and recommendations of the 2009 World Development Report to help refine and enhance Chongqing's own strategic development plan. The Bank also recently completed analytical studies and policy notes on important topics related to urban-rural

integration, which will be used to develop a reform agenda to compliment the investments supported under the lending operations.

# 3. Higher level objectives to which the project contributes

12. The project supports two prominent themes of the Country Partnership Strategy: (a) facilitating an environmentally sustainable development process; and (b) addressing the needs (water, roads, and health services) of poorer and disadvantaged people and provinces. Training of rural migrants will help: (a) reduce poverty, inequality and social exclusion; and (b) improve public and market institutions. The project also supports the government's Eleventh Five-Year Plan (2006-2010), and the Bank's urban and water sector strategies for China, which emphasize increasing sustainability and affordability of basic services.

# **B. PROJECT DESCRIPTION**

# 1. Lending instrument

13. Specific Investment Loan (SIL).

# 2. Project development objective and key indicators

14. The development objective of the project is to assist Chongqing Municipality in increasing access of residents in selected counties and districts to improved public services, including roads, water supply, employment training, and primary health care.

15. Given the limited financing of the project, outcomes are expected to be modest and measured on a targeted rather than a Municipal-wide basis. The key outcomes of the project would be measured by the following indicators: (a) increase in population with access to road transport networks that reduce travel time to main urban county centers; (b) increase in population with access to safe drinking water; (c) increase of population with access to primary health care services at the community level; and (d) increase of vocational training capacity, and of the number of trainees having successfully completed training programs. Annex 3 contains additional information on the overall and intermediate outcome indicators for each component.

# 3. Project components

16. The total estimated cost of the proposed project is US\$190.16 million (IBRD loan of US\$84 million). The project is comprised of the five components, which are described in the succeeding paragraphs.

17. The counties' roads and water infrastructure component will focus on improving such infrastructure mainly in county capitals. The townships and villages infrastructure component will provide packages of infrastructure improvements to smaller settlements (townships and villages). The migrant training component will focus on enhancing training institutions' capacity to design and deliver training programs. The community health care services component will finance the construction and equipment of village health clinics, urban health institutions, and

one hospital. Feasibility Study Reports (FSR) were completed for 16 sub-projects which are in full compliance with the project's selection criteria<sup>2</sup> and fall under the five components listed below. More details on the components are presented in Annex 4 and a detailed cost breakdown is provided in Annex 5.

#### Component 1 - Roads and Water Supply (US\$119.68 million):

18. Building and developing transportation and water supply networks in the following jurisdictions to increase or provide access to other geographical areas and safe drinking water:

- (a) Construction of roads and related transport infrastructure in Banan District, Tongliang County, Xiushan County and Yongchuan District; and
- (b) Construction of water supply infrastructure in Xiushan County, Fengjie County, Shizhu County, and Xiushan County.
- 19. More specifically, the road and the water supply works include:
  - (a) In Banan District, construct a class II road (including, bridges and tunnels) from Huimin to Nanpeng and an urban road in Huimin township;
  - (b) In Xiushan County, construct a class I road from Mie'ao to Yangjiadong, which forms a section of Liangting Road and the first phase of the road expansion;
  - (c) In Tongliang County, construct five rural roads and seven urban roads in six townships;
  - (d) In Yongchuan District, construct 13 class III-IV roads in Banqiao Town;
  - (e) In Fengjie County, construct a water delivery and distribution network to supply water to Zhuyi Town;
  - (f) In Shizhu County, construct a water treatment plant and distribution network to supply water to Huangshui Town; and
  - (g) In Xiushan County, construct three water treatment plants and related distribution networks to supply water to three towns.

#### **Component 2 - Township and Village Infrastructure (US\$10.71 million):**

20. Building and improving basic public service infrastructure in Qijiang County, Wanzhou District and Chengkou County including, inter alia, in such infrastructure construction of roads, service centers, water and waste water facilities, distribution pipes, and garbage collection stations and points, all with a view to improve or increase access to public services.

<sup>&</sup>lt;sup>2</sup> The selection criteria includes: (a) compliance with the urban-rural integration reform as set by CMG; (b) compliance with planning as set in the 11<sup>th</sup> Five year plan and associated documents (sector, county and district master plans); (c) financial capacity to repay the loan (at the municipal, district/county, and town/village levels); (d) subproject contains clear targets and content; (e) subproject provides clear social benefits to its population (f) each intervention has properly presented and economically evaluated detailed alternative options and scenarios; (g) each intervention will abide by the specific sector design criteria; and (h) intervention location identified not only based on the financial capacity of the county/district to repay the loan, but also on a strategic spatial location of the project site.

# **Component 3 - Migrant Workers' Training for Transfer and Employment (US\$13.91 million):**

21. Expanding access and improving quality of training for rural migrants to enhance their employability by, *inter alia*, carrying out the following in Selected Education Institutions:

- (a) Workshops and consulting services to strengthen school-industry linkage;
- (b) Providing equipment and upgrading buildings and workshops to facilitate delivery of training programs;
- (c) Updating curricula and training materials to increase the quality and relevance of training;
- (d) Providing teacher training to improve the quality of instruction;
- (e) Designing new tests to improve the assessment of training;
- (f) Providing technical assistance for capacity building, monitoring and evaluation, tracer studies and employer surveys, all to improve overall school management.

# Component 4 - Community Health Care Services (US\$43.66 million):

22. Improving access to, and enhancing quality of health care services in, rural and periurban areas of Chongqing as follows:

- (a) Equipping of village clinics and urban Community Health Care Centers by providing medical and other equipment and training required for the delivery of health care services; and
- (b) Expanding the Yubei District hospital by constructing the additional hospital facilities on a new site, and providing medical, and other equipment for such facilities and training required for health care services.

# **Component 5 - Institutional Support and Technical Assistance (US\$1.99 million):**

- 23. Facilitating Project implementation through the provision of consulting services to:
  - (a) Enhance the design, review, and certification of works carried out under the Project;
  - (b) Strengthen the capacity of the Project Implementation Entity (Chongqing) at the municipal and county level in the areas of project management, procurement and contract management, accounting and financial management, and compliance with safeguard policies; and
  - (c) Conduct policy study on O&M mechanism for public utilities in rural areas.

# 4. Lessons learned and reflected in the project design

24. Through its close working relationship, the Bank and Chongqing authorities have learned many valuable lessons that have been incorporated into project design. Among them are:

- (a) *Ownership*. Experience from a full range of projects financed by the Bank in the infrastructure sector in China and elsewhere points to the importance of borrower ownership and efficient planning of capital investments, as well as ensuring proper institutional arrangements. The proposed project will incorporate these lessons as it makes efficiency and sustainability of capital investments a key objective.
- (b) *Cost estimates have been problematic* in some urban projects in China, including CUEP and CSCP. Adherence to traditional government cost estimation methods (which are based on "norms" rather than market prices) have frequently resulted in unrealistically high project cost estimates and unexpected loan savings. In the proposed project, international consultants have conducted a rigorous independent verification of the designs to ensure that the estimations for all sub-components are as close to market prices as possible.
- (c) Engineering Designs. While previous engineering designs under CUEP and CSCP have been generally acceptable, there is ample room for improvements. The CPMO has played a more active role in ensuring that the local design institutes chosen have the proven capacity to properly design the subprojects. Additionally, a design review process led by international consultants is being followed to review all subproject designs, and thus minimize contract variation orders during execution.
- (d) *Improved Coordination.* Another lesson learnt from previous implementation is that better coordination is needed between the CPMO and the local Project Implementing Units (PIUs). Under CURIP, the CPMO will assign representatives to the PIUs to provide policy guidance, and to coordinate between them and higher authorities of CMG, thus ensuring smooth preparation and implementation of the relevant subcomponents. The involved project districts and counties will take responsibility for mobilization of project funding during preparation and implementation.
- (e) CPMO Strengthening. Based on experience from the supervision of existing projects, the Bank team believes that further strengthening of the current CPMO is needed in the areas of procurement, contract management, engineering, and FM/disbursement. CURIP includes provisions, under the project management's consultancy, to address training for PIUs and relevant county officials to strengthen their operational capacities.
- (f) *Counterpart Funds.* Smaller local governments, especially in western China, tend to have weaker financial capacity, making it difficult for them to provide counterpart funds on a timely basis, and for ensuring adequate resources for operations and maintenance are available. In CURIP, while the participating smaller local governments are expected to provide the needed counterpart funds and budgets for O&M of the assets created, CMG is mitigating this risk by

ensuring that it will fill in any shortfall of funds in case local governments find it difficult to come up with the needed resources.

# 5. Alternatives considered and reasons for rejection

25. Careful analysis of different broader project designs and individual components were carried out during project preparation, including the following:

- (a) a component for strengthening rural financial services was considered, but was not included in the project because of the Bank's lack of comparative advantage in the area;
- (b) a component related to low-income urban housing for rural migrants was dropped due to its complex nature and the need to first take a look at the housing finance program in Chongqing municipality and China more broadly, which was deemed not feasible within the time frame and budget constraints of project preparation;
- (c) a long list of potential sub-components was initially identified but progressively screened and refined, and unsuitable or non-feasible investments that failed to meet the agreed criteria or project objectives were dropped;
- (d) a number of sub-components were scaled back or eliminated, as they failed to meet the criteria of least cost solutions or were considered to be over designed; and
- (e) a few sub-components were dropped when county governments were able to access alternative, cheaper funding from other sources, including the government's current economic stimulus program.

# C. IMPLEMENTATION

# 1. Partnership arrangements (if applicable)

26. The project is free-standing and does not have any co-financiers.

# 2. Institutional and implementation arrangements

27. CMG established a project leading group at Municipal level, headed by a Vice Mayor, to oversee the preparation of the proposed project. Representatives from Chongqing Development and Reform Commission (DRC) and Chongqing Finance Bureau (FB) are designated as deputy Directors of the Leading Group. In addition, the Leading Group is staffed with representatives of Chongqing Health Bureau, Chongqing Labor & Social Security Bureau, Chongqing Education Commission, Chongqing Construction Commission, Chongqing Agricultural Commission, Office of Foreign Affairs of CMG, and Finance Office of CMG. The Leading Group takes responsibility for organizing, coordinating, providing guidance and overseeing project management and operation. A leading group at each city/district/county level was also set up, led by the respective head of the county or district, which has similar structural arrangements as the Municipal leading group. The Leading group, under the guidance of the CPMO, will be responsible for the review of project design, coordinating mobilization of counterpart fund,

payment of loan proceeds, helping settle any critical issues encountered during project implementation, overseeing project implementation, and engineering completion acceptance.

28. Project Implementing Units (PIUs) at the city/district/county levels have been set up to carry out the day-to-day subproject preparation and implementation. The CPMO recruited the services of independent specialist consultants to: certify compliance with agreed design criteria, design principles and cost estimations for subcomponents to pass eligibility criteria, and for independent construction supervision arrangement for municipally managed activities. The independent specialist consultants' services will be expanded to certify compliance of the agreed RAPs and EMPs with Bank environmental and social safeguards.

29. All implementing agencies are owned by either Chongqing Municipality or the participating cities/districts/counties, which are empowered to borrow and repay loans. The PIUs will own, operate and maintain the project-financed assets. The names of the agencies responsible for preparing and implementing the various components are included in Annex 6; other details are contained in the Project File.

# 3. Monitoring and evaluation of outcomes/results

30. Annex 3 lists the main outcome indicators for the project, as well as the principal results indicators for each component. The PMO and local government PIUs will regularly collect the data required for monitoring and evaluation of outcomes/results and produce semi-annual reports. CMG and CPMO will review the results on the basis of the progress reports, and take appropriate corrective action, when and where necessary.

# 4. Sustainability

31. CMG provided assurances that the necessary human and financial resources will be available to carry out project implementation, and to operate and maintain the assets created. The local agencies that implement the roads, water, and health subcomponents have provided assurance that adequate budgets will be available for the satisfactory operation and maintenance of the facilities constructed.

32. CMG also provided assurance that full cost recovery in the water sector is an accepted principle. Where such action is not taken, on account of affordability or high unit costs for rural water supply schemes, CMG will help ensure that project-related finances are adequate.

33. Strengthening training institutions' capacity and the training of migrant workers will lead to better integration and overall Municipality-wide economic growth.

Risk	Risk Mitigation Measures	Risk Rating with Mitigation
To project development objective		
Project is spread across 16 counties/districts and various sectors,	Strengthening of CPMO capacity and presence in counties. Hiring of	Substantial

# 5. Critical risks and possible controversial aspects

making it difficult to implement, monitor and supervise. Limited capacity of poorer counties to raise sufficient counterpart funds to cover investment costs and O&M expenditures.	<ul> <li>international design and review</li> <li>consultants to certify designs and</li> <li>provide technical assistance. Frequent</li> <li>and detailed supervision missions by</li> <li>Bank team from Beijing office.</li> <li>Subproject costs were carefully tailored</li> <li>to financial capacities of participating</li> <li>counties, and CMG agreed to provide</li> <li>backstop funding to cover any financing</li> <li>gaps.</li> </ul>	Low
To component results Water Supply: Inadequate tariff increases for WS subprojects will undermine their financial sustainability.	CMG provided assurance on full cost recovery principle in water sector as accepted principle. If not followed, CMG will ensure that finances are adequate.	Low
<i>Vocational Education and Health</i> <i>Services:</i> Over emphasis on constructing and upgrading infrastructure facilities, without due attention to innovations and institutional reforms.	Commitment from CMG and participating agencies to carry out studies, reforms and innovations under project. Front load targeted TA and training for innovation and reform activities.	Moderate
Institutional Strengthening and Training Program: Institutional development of implementing agencies/utilities is delayed or not fully effective.	Agreement with CPMO on clearly defined institutional development program. Consultants will be engaged early in project implementation.	Low
Subproject designs and procurement: The quality, costs and timely implementation of subprojects will not be fully satisfactory due to limited capacities of PIUs and lack of experience in Bank financed projects.	Qualified design institutes will be engaged to help prepare subprojects, and international consultants will be hired to certify designs and supervise implementation. Bank will provide intensive training and support on procurement activities.	Substantial
Overall risk rating		Moderate

# 6. Loan/credit conditions and covenants

Loan Effectiveness: None

# **Condition of Disbursement:**

(a) Signing of subsidiary loan or implementation agreements acceptable to IBRD between districts/counties and their implementing agencies.

#### **Implementation Covenants:**

- (a) Maintain the CPMO, and local government PIUs throughout implementation with qualified and adequate staff.
- (b) Onlending Bank loan proceeds on terms and conditions satisfactory to the Bank.
- (c) Provide, or cause to provide, adequate funding for counterpart requirements, debt repayments, and operations and maintenance.
- (d) Prior to delivery of equipment financed under the project to any community-based health care clinic, Chongqing shall provide to the Bank evidence that such a clinic has been upgraded or constructed to meet municipal standards for operation of such equipment.
- (e) Carry out a Mid-Term Review of Project implementation to make adjustments, as necessary, to achieve project objectives and to share experiences to-date and lessons learned with others.

#### **D. APPRAISAL SUMMARY**

#### 1. Economic and financial analyses

34. Economic Analysis: Economic benefits and costs of the project have been identified and quantified to the extent possible. The project's main economic benefit is the improvement in living standards and public health of local residents (especially rural population) in the project areas. Economic benefits include the following: improved water supply (both water quality and supply reliability); road improvements, leading to savings in travel time and costs, productivity increase, and avoided traffic accidents; improved public health and quality of living due to water supply and sanitation improvements in project areas; productivity increases due to training of migrant workers; productivity increase, time and cost saved, and diseases reduced due to improved health services at community health centers and village clinics; and amenity and land value increases associated with the improvement of road accessibility, environmental quality, and ecological upgrading. The demonstration effect of the project should bring about long-term benefits to rural development in Chongqing and similar regions in China through piloting the new countryside development program (NCDP). Economic costs of the project are capital investment costs (and associated resettlement and environmental mitigation costs of the investments) and O&M costs.

35. Given that the project includes a large number of diverse components - including road construction and upgrading, water supply and sanitation infrastructure development, capacity building for training migrant workers, and public health service improvements in 16 districts or counties - it is difficult to conduct cost-benefit analyses for each and every sub-project. In some cases, data needed to estimate benefits is either unavailable or would be very difficult to obtain. Therefore, a mix of cost-benefit analysis and cost-effectiveness analysis was used to analyze the project.

36. Cost-benefit analysis was used to evaluate the economic viability of the following components: road improvements, skills training for migrant workers, and Yubei Hospital. For the rural public health service improvement component, which involves the construction and rehabilitation of about 576 public health service centers/clinics in various districts/counties, it was not feasible to carry out the cost-benefit analysis for every investment site. Economic analysis was conducted, however, by using of a case study of a representative investment.

37. The water supply and township and village infrastructure components have development targets that have been set by local governments based on their importance to public health and the quality of life of residents. Due to the difficulty in quantifying and monetizing the benefits of these components, the cost-effectiveness approach was used to ensure that least-cost design options have been adopted to achieve development targets.

38. Cost-benefit analysis of the road component shows that all four subcomponents are economically viable: economic internal rates of return (EIRR) are 18.2% (Tongliang), 11.7% (Banan), 15.9% (Yongchuan), and 17.8% (Xiushan). Cost-benefit analysis of the skills training component also shows that 1 the four subcomponents are economically viable with an EIRR of 17.6% (Wushan), 17.1% (Yubei), 15.9% (Shizhu), and (13.7%) Chongqing Technology and Business University.

39. Sensitivity analyses conducted for the four road subcomponents and the four skills training subcomponents, as well as the improvement of the Central Hospital in Yubei District (under the assumption of either/both 10% decrease in economic benefit and 10% increase in total costs) show that the EIRR for all the investments are robust.

40. Given the objectives of the project and the variety of benefits it would provide to the project areas, the population in general and the poor in particular, would greatly benefit from the investments. Surveys done in the project areas to test public support for the proposed water supply, sanitation and other infrastructure investments show that local people are very supportive of improved public services. However, since most of the project areas are less developed areas with low income levels, the price that would need to be charged for water supply and health care in order to achieve financial viability would not be affordable to lower income households. Local governments will therefore shoulder most of the project investment costs and are committed to providing support to low-income households; consequently, the project anticipates no negative impacts on the poor.

41. <u>Financial Analysis</u>. Financial analysis was carried out at three levels: municipal, project, and entity level. At the municipal level, the financial analysis assessed the financial capacities of local governments to contribute equity during implementation and to service the debt. At the project level, the financial analysis ascertained the financial viabilities of individual subcomponents. At the entity level, the financial analysis evaluated the project entities to assess the adequacy of cash flow to support the operation of the respective subcomponents.

42. The financial capacities of governments of Xiushan County, Yongchuan District, Wushan County, Shizhu County, Qijiang County, Chengkou County, and Yubei District were assessed. The results show that the requirements of equity contributions and debt service account for less

than 1% of the fiscal revenue each year, i.e., the local governments will have sufficient resources to support the proposed project during implementation and for debt service payments.

43. The financial analyses of migrant workers' training subcomponents assessed whether government subsidies would partially cover the costs of training. The results show that proposed government subsidies for migrant workers' training will cover training costs and enable the institution to service the debt on the loan related to the migrant workers' training programs.

44. For water supply subcomponents, a financial analysis was carried out to assess whether the water tariffs could meet the O&M expenses and the debt service burden. The results show that the cost coverage ratios will be more than 1 and the debt service coverage ratios will be more than 1.3, provided the participating local governments increase their water tariffs to levels needed to achieve financial equilibrium. The average current water tariff and the suggested water tariff used in the financial analyses are listed in the table below.

	Current Water Tariff Suggested Water Ta	
Fengjie	RMB2.26/m3	RMB2.26 / m3
Shizhu	RMB 2.11/m3	RMB 2.37/m3
Xiushan	RMB1.50/m3	RMB2.64/m3

#### Average Current and Suggested Water Tariff in Water Supply Subcomponent

45. Financial analysis was not carried out for road, township and village infrastructure improvement, as well as for community health center (CHC) components, since their O&M costs will be covered by local government budgetary funds.

46. The financial viability of Yubei People's Hospital was analyzed since the implementing entity will finance the implementation and operation of this subcomponent from internal resources. The results show that Yubei People's Hospital will have sufficient cash flow to meet the operating expenses, debt service, and future investment needs.

# 2. Technical

47. CURIP has been prepared using the approach followed under previous Bank funded projects (CUEP and CSCP) with enhancements made to improve design quality and reduce contract variations during implementation. An international Design Review Consultant (DRC) "signed off" on design criteria, design principles, cost estimates, and procurement arrangements. This process has led to more efficient and least-cost designs, and avoided over-design of facilities.

48. An international consultant firm will provide Construction Supervision and Contract Management services as the representative of the PIUs and others (under arrangements similar to FIDIC terms). The consultant will review and clear bidding documents prior to bidding, and function as the Engineer under the contract, as the representative of the PIUs. The firm will be supplemented by additional local consulting firms that would be employed by the counties/districts to provide day to day contract management.

# 3. Fiduciary

49. A financial management assessment concluded that the project meets the Bank's financial management requirements, as stipulated in BP/OP 10.02. Overall, the local finance bureaus and project owners have adequate capacity. The project will have in place an adequate project financial management system that would provide, with reasonable assurance, accurate and timely information on the status of the project in a reporting format agreed with the Ministry of Finance (MOF) and the Bank. For further details on financial management see Annex 7.

50. Fund flows and disbursement arrangements would follow those of CSCP. The PIUs would pass on certified payments to the CPMO, which will submit withdrawal applications to the Bank through the Chongqing Finance Bureau (CFB). Bank loan proceeds would flow from the Bank into the project's Designated Account, to be set up and managed by CFB, to relevant district and county finance bureaus to the PIUs, and finally to contractors and suppliers. Onlending arrangements for the Bank loan will be signed between CFB and local finance bureaus and implementing agencies. Bank loan funds will be passed on to local agencies on the same terms and conditions as loan funds are provided by MOF to CFB.

51. Given the limited finances of some of the sub-projects' owners, CFB will provide advance payments of loan funds to local finance bureaus and PIUs to ensure adequate cash for early project start-up. To further strengthen its financial management capacity, the CPMO will retain a financial management specialist to help supervise financial and audit aspects of both CURIP and CSCP. The current Financial Management Manual (FMM) of CSCP has been updated, and will be followed during CURIP implementation.

52. Procurement capacity assessment was carried out in June 2009 and confirms that the CPMO and the PIUs will have the capacity to comply with Bank procurement policies, subject to necessary training being provided by the Bank and consultants. For further details on procurement, see Annex 8. The Procurement Capacity Assessment Report (PCAR) is available in the Project File. The PIUs will select component local firms, familiar with Bank procurement requirements, as procurement agents for both ICB and NCB procurement.

# 4. Social

53. The project will reduce inequality in access to basic social services (transport, water, sanitation, health, and vocational education) between 16 districts/counties and urban areas in Chongqing Municipality, by helping to integrate the lagging rural areas with the more prosperous urban areas of the municipality so as to achieve a better balance of economic, social and environmental development. Project investments will promote rural health care services, facilitate rural labor transfer, and ensure that residents in lagging regions have improved access to basic in infrastructure services and better opportunities for training, employment and social services.

54. The main adverse social impacts of the project are largely related to land acquisition and demolition of structures for the infrastructure components of the project. In accordance with

local laws and regulations, and the World Bank OP 4.12 on Involuntary Resettlement, Resettlement Action Plans (RAPs) have been prepared for the infrastructure components. The RAPs are based on detailed census of the affected people, inventory of affected assets, socioeconomic surveys and extensive consultations with project affected people. Resettlement impacts are modest and scattered among several areas in Chongqing, with about 3,300 people affected by land acquisition and house demolition, and 1,200 mu (equivalent to 80 hectares) of land acquired for project purposes.

# 5. Environment

55. Bank policy OP 4.01 Environmental Assessment is triggered and the project has been classified as Category B. 10 Chinese language Environmental Impact Assessment (EIA) documents were prepared for the proposed project components, and in each EIA document, an associated Environmental Management Plan (EMP) has also been developed as a section of the EIA document. Based on each EIA document, a Consolidated Environment Assessment (CEA) Summary Report has been compiled to present the key environmental issues of the sub-projects, mitigation measures and EMP implementation arrangement, etc. All documents have been prepared on the basis of Chinese legal and policy framework for environmental protection, master plans and environmental plans as well as applicable Bank safeguard policies. Major findings of the EIAs and key points on EMPs are presented in Annex 10.

56. *Expected Environmental Benefit*. The water investments will provide reliable potable water supply to more than 109,000 people in 3 counties who currently suffer water shortage and poor water quality. The road components will improve the transportation and connectivity of about 473,000 people in 4 counties. The health component will improve access to basic health services for more than 420,000 local people throughout the villages in Yubei District of Chongqing Municipality.

57. *Key Impacts and Mitigation Measures during Construction and Operations.* Adverse impacts during the construction of the proposed road, water distribution network, wastewater collection system, and water works include airborne dust, noise, traffic disruption and disposal of spoiled materials. Contractors will manage the construction site properly, e.g., to water construction sites during dry and windy seasons, develop plans to mitigate noisy construction activities and avoid/ban night time construction, maintain equipment in good operating conditions, and develop temporary traffic plans to detour traffic around construction sites. Details of mitigation measures are provided in Annex 10.

58. *Public Consultations and Information Disclosure*. Public consultations have been carried out during the EIA process through surveys using public opinion questionnaires, focus group discussions, public meetings with key stakeholders, and interviews with some project affected persons. Issues raised during these consultations have been incorporated in the EIAs/EMPs. Feedback on the concerns raised during public consultation has been provided to the concerned groups and documented in the EIA documents. The EIA and other project related documents have been disclosed locally through various means (e.g., websites, information board of local community, etc.), as required by national and Bank policies. The English language CEA summary report was disclosed at the Bank's InfoShop on September 14, 2009.

#### 6. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[]
Natural Habitats ( <u>OP/BP</u> 4.04)	[]	[X]
Pest Management ( <u>OP 4.09</u> )	[]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[]	[X]
Involuntary Resettlement ( <u>OP/BP</u> 4.12)	[X]	[]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[]	[X]
Forests ( <u>OP/BP</u> 4.36)	[]	[X]
Safety of Dams ( <u>OP/BP</u> 4.37)	[X ]	[]
Projects in Disputed Areas ( <u>OP/BP/GP</u> 7.60) <sup>*</sup>	[]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[]	[X]

\* In the context of China, Indigenous Peoples refer to minority nationalities

*a. What is the safeguard screening category of the project?* (S1, S2, S3, S4) Category S2.

*b. What is the environmental screening category of the project?* (A, B, C, F1) Category B.

#### Indigenous Peoples (OP4.10)

59. There are some Tujia and Miao ethnic minority groups in Xiushan and Shizhu Counties. However, they are not culturally distinctive from local Han communities, but are intermingled and acculturated with them. There is a common local culture in terms of language, production mode, living habits and folk beliefs, as well as self-perception; neither the Tujia nor the Miao groups appear to be vulnerable. Therefore, the Tujia and the Miao ethnic groups in the project areas do not meet in the definition of Indigenous Peoples as spelled out in OP4.10, and thus this safeguard policy is not triggered.

#### Involuntary Resettlement (OP4.12)

60. Six CURIP sub-project entail land acquisition and involuntary resettlement due to the construction of roads and wastewater treatment plants, triggering OP4.12. Six individual RAPs (or abbreviated RAPs) were prepared by the related PIUs, based on detailed impact assessment, and socio-economic surveys, as well as extensive consultation with affected local village communities and households. These RAPs set forth series of measures to ensure that the affected people would be adequately compensated and their livelihoods would be sufficiently rehabilitated. A Consolidated RAP was developed to summarize the contents of individual RAPs.

<sup>\*</sup> By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

61. **Safety of Dams.** The Dam Safety Safeguard Policy (OP 4.37) is triggered by the Project because water supply systems to be constructed by the Project would draw directly from a number of reservoirs controlled by existing dams; also, the project sites are located downstream from a number of existing dams, and the failure of the upstream dams could cause extensive damage to (or failure) of some or all the investment under the Project. A total of 9 dams trigger the policy. All 9 dams have been remedied. The national Government has also issued guidelines and regulations for dam safety management, including (a) Reservoir Dam Safety Management regulations; (b) Regulations on Reservoir Dam Safety Review; (c) Guidelines for Dam Safety Review; (d) Guidelines for Emergency Preparedness Plan; and (e) Guidelines for Operation, Maintenance and Surveillance of Dams. During Project implementation, the Bank (together with a Dam Safety Expert, to be hired under the project management service contract) will monitor the safety status, operation and maintenance, and emergency preparedness of all these dams, and supervise the implementation of further remedial work of these dams, if any, to ensure that the project complies with the OP 4.37. More detailed information is given in Annex 10.

#### 7. Policy Exceptions and Readiness

62. *Translation Waiver*. In accordance with the revised guidelines on English translation waiver (March 2008), it was agreed by the EAP Safeguards Secretariat that the Environmental Impact Assessment (EIA) prepared for each project component and an associated environmental management plan (EMP) developed for each project component will be in Chinese language. By the same token, the six individual RAPs (or/and Abbreviated RAPs) prepared by PIUs for six separate components will be in Chinese Language. The Consolidated Environment Assessment (CEA) Report and the Consolidated RAP have been translated into English for review and approval by the Bank. The Chinese language EIAs/EMPs and the RAPs(or/and Abbreviated RAPs) as well as the English language CEA Report and the Consolidated RAP are acceptable to the Bank.

# Annex 1: Country and Sector or Program Background CHINA: Chongqing Urban Rural Integration Project

1. **Rapid Urbanization.** China is experiencing rapid urban growth, with 46% of the population currently living in urban areas, up from 29% in 1995. That trend is expected to continue with the urban population projected to reach 70% by 2020. This increase in the urban population is a result of several factors, notably the Government's decision to reduce controls governing population mobility and a falling demand for farm labor. This rapid urban growth is pressuring cities to expand their public infrastructure, increase municipal services and provide employment for migrants. To relieve some of these pressures, government policy is now focused on secondary cities and peri-urban areas, where the aim is to create conditions and facilities to attract investments and accommodate growing populations.

2. Development of Western Region. Since the mid 1990s China has been emphasizing development of its lagging western regions. The largest city in the West is Chongqing Municipality, the only municipality in the west with provincial status (Beijing, Tianjin and Shanghai also have provincial status). Chongqing has the third fastest economic growth of all Chinese cities, but compared to Beijing or Shanghai its per capita GDP is lagging. Chongqing Municipality has a territory the size of Austria at about 82,400 km2. It is divided into 40 county level subdivisions consisting of 19 districts, 17 counties, and four autonomous counties with minority populations. Chongqing's population counts about 33 million, of which 17.5 million are rural residents. Some 28 million are considered permanent residents while the remaining 5 million are migrants. Population growth has been steady at about 200,000 annually. Some of this growth is the result of large numbers of immigrants, estimated at 1 million per year, from other provinces. The recent economic downturn has caused growing unemployment in key economic zones such as Shenzhen and Guangdong, with the result that laid-off workers are returning to their ancestral homes. This is certainly true of emigrants from Chongqing who are now returning and causing even further pressure on the municipal government's services and infrastructure.

3. **Urban-Rural Demographics in Chongqing.** The one-hour economic circle, is centered on the 9 central districts of the city of Chongqing proper and consists of all districts and counties which are within one hour's driving distance. This corresponds to, roughly, a 50-60 km radius which encompasses 14 districts in addition to the 9 central districts. Meanwhile, the two wings consist of the northeast wing, which has 11 counties and districts, and the southwest wing, which has 6 counties and districts. Moreover, even within the one-hour circle, the pace of urbanization was faster in the 9 central districts than in the other 14 districts thereby leaving these districts more peripheral (rural) in character and more similar to the majority of districts and counties which belong to the two wings.

4. The one-hour circle is expected to drive the development and urbanization process with consequent spillovers to the two wings, whilst the two wings will specialize in productive rural activities (the northeast wing) and tourism (the southeast wing), respectively. Chongqing's MP focuses on reducing income inequality throughout the municipality, improving access to infrastructure and basic services, and reducing existing disparities in the social safety support programs. It mentions four guiding tools through which the inequality could be addressed: (a)

directing industry to desired geographic areas; (b) establishing an expenditure mechanism to improve basic public services in rural areas; (c) improving cooperation between Chongqing's three major geographical zones (the 'one hour circle' around the city center and the two wings – north east and south east); and (d) deepening reforms in the Municipality's administrative management systems.

5. **Improving basic services.** At present large gaps exist in the provision of and accessibility to basic services between the nine central districts of Chongqing and the rest of the Municipality. In both the health and education sectors, Chongqing's nine central districts have systematically better levels of service across a wide range of inputs. Provision of services such as tap water, centralized wastewater disposal systems, water treatment and garbage stations is also greater. These gaps are expected be closed by building new facilities and rehabilitating existing ones. Spatially connective infrastructure is vital to the Municipality's growth because it would increase economic density. Economies of scale could be achieved if greater numbers of rural residents could access medium and larger scale health and educational facilities found in more urbanized locations. Furthermore, rural accessibility to existing infrastructure can be increased by raising the quality and coverage of connective infrastructure.

6. Right now under the Chinese system of "*hukou*" only registered citizens can legally access municipal services. Reform of *hukou* is necessary to grant all citizens equal access to basic social services especially in the nine central districts. In these nine, the resident population exceeds the registered population by as much as 23.5%. Therefore, although these districts have systematically higher levels of basic services, large portions of their populations may not access them because they are not "registered". Reform of *hukou* would not only increase service provision levels, but it would also promote a less distorted pattern of labor mobility, that would contribute to building economic density.

7. **Skills Development** The demand for labor in Chongqing's labor-intensive heavy industries and services is primarily in low-skilled occupations. The biggest challenges Chongqing faces are moderating the social consequences of returning migrants from China's key economic zones, facilitating the ongoing restructuring of employment, and balancing opportunities within the Municipality. Education and training will play a vital role in helping Chongqing confront these three issues.

8. **Economic and Sector Work recently completed.** As the 2009 World Development Report points out, there tends to be a positive correlation between GDP per capita and a region or a county's urban rate. This suggests a possible causal relationship between development, urbanization and the narrowing of urban-rural income disparities. It is an important subject being taken up in more detail in the Bank's recently completed economic and sector work in Chongqing. The convergence of living standards will occur through the mechanism of ruralurban migration reducing the surplus of labor on agricultural land and reducing competition in rural labor markets. The release of labor from agricultural land will be partly promoted by laborsaving technology progress, which also improves rural productivity. Over time, if adequately supported, investments and fiscal re-distributions will also provide rural residents local access to basic amenities, such as clean drinking water, sanitation and roads, as well as education, health care and other social services. 9. More specifically, the general approach being followed by Chongqing, with Bank support, is to promote long-term balanced urban-rural development by improving the functioning of the full portfolio of places (i.e., districts, counties, towns and villages) in Chongqing. Past experiences in developing countries, including China, have shown that such an approach will contribute to the building of economic density, which will drive aggregate increases in productivity, while, in the long-run, simultaneously reducing urban-rural disparities through the integration of peripheral agricultural areas. The convergence of living standards will occur through the mechanism of rural-urban migration reducing the surplus of labor on agricultural land and reducing competition in rural labor markets. The release of labor from agricultural land will be partly promoted by labor-saving technology progress, which also improves rural productivity. Overtime, if adequately supported, investments and fiscal re-distributions will also provide rural residents local access to basic amenities, such as clean drinking water, sanitation and roads, as well as education, health care and other social services.

10. Land issues are central to the economic and social transformation experienced by Chongqing over the last three decades. Central Government land policy during this period has been dynamic, continually evolving in response to these changes. Yet, despite the recent reforms, significant issues and challenges remain to be addressed in Chongqing's progress towards effective land reform. Many of these arise from a lack of clarity in laws and regulations which lead to widely different interpretations; others arise from inefficient institutional structures and from practices that are not sanctioned by law. Of particular concern are the issues arising from the process of farmland conversion to urban uses.

11. The *hukou* system is one of the strongholds inherited from centrally planned economy. According to this system, people are registered in a certain locality and their registration allows them access to social services, including healthcare, schooling for their children, and other forms of social assistance (*dibao*). People without *hukou* registration are not entitled to receive (for free) any of these services at the place of their actual residence. The *hukou* system is thus a serious barrier to labor mobility and migration between rural and urban localities within Chongqing Municipality and to out-migration of workers from Chongqing to other provinces. The goal of *hukou* reform is to reduce the income and welfare disparities between rural and urban residents. In principle, this has to be achieved by equalizing access to social services (rural and urban *dibao*) and by ensuring equal employment opportunities to rural and urban residents without restrictions imposed by registration considerations. Reforming the *hukou* system is a complicated protocol that touches on every citizen's interests and may lead to disastrous outcomes if not planned carefully. Policy makers in Chongqing should consider the following aspects before implementing *hukou* reforms.

# Annex 2: Major Related Projects Financed by the Bank and/or other Agencies CHINA: Chongqing Urban Rural Integration Project

Project	Sector Issue	Delivery	Latest IS	SR Ratings	
		Date	Development Objective	Implementation Progress	
Bank Financed					
China - Chongqing Urban Environment Project	Environmental infrastructure improvements for urban and peri-urban areas throughout the Municipality	15June,00	S	S	
China – Chongqing Small Cities Infrastructure Improvement	Infrastructure service delivery and rapid urban growth	21June,05	S	MS	
China – Western Rural Water Supply, Sanitation and Hygiene Promotion Project	Increase access of poor participating communities to sustainable and equitable water supply, sanitation and hygiene promotion services	26June,07	S	S	
China – Rural Migrant Skills Development & Employment Project	Support the transition of rural workers to urban areas to access better employment opportunities that improve their incomes and working conditions	24June,08	S	MU	
China – Rural Health Project	Increased and more equitable access to quality health services, improved financial protection, and better management of public health threats in pilot provinces and counties, with lessons to support reforms in non- project areas	24June,08	MS	MS	
China - Technical and Vocational Education Training	Improve the quality and relevance of technical education and produce lessons from this experience as a guide for future school reforms and policy development	02June,09	S	S	
China – Poor Rural Communities Development Other MDBs and Agencies	Livelihood security, and rural poor participation	21June,05	MU	MU	
Guangxi Nanning Urban	Infrastructure Development	N/A	N/A	N/A	
Environmental Upgrading (ADB) Nanning – Langdong WWTP, Phase I (French Government)	Infrastructure Development	N/A	N/A	N/A	

Henan Wastewater Management and Water Supply Project (ADB)	Wastewater mgt and water supply for public health and urban environment	N/A	N/A	N/A
Private Sector Water Supply Project in China (ADB)	Safe water supply to urban residents	N/A	N/A	N/A
Guangxi Water Supply Project (JBIC)	Water supply, Infrastructure Development	N/A	N/A	N/A
Water and Agricultural Management in Hebei Project (AUSAID)	Water resources management in agriculture	N/A	N/A	N/A

# Annex 3: Results Framework and Monitoring CHINA: Chongqing Urban Rural Integration Project

#### **Results Framework**

PDO	Project Outcome Indicators	Use of Project Outcome Information
Increase access of residents in participating districts and counties to improved basic public services (roads, water supply, primary health care, and vocational education).	Increased population with access to safe drinking water supply in targeted service areas Increased population with access to road transportation networks that reduce travel time to main urban county centers Increased share of outpatient case load at community level in total case load in targeted service areas Increased population with access to primary health care services at the community level in targeted service areas Increased number of trainees successfully completed the vocational training programs	Measuring extent to which project achieves main objectives of the project across the various components
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
Counties' Roads and Water Supply Infrastructure	Increased number of kilometers of connector roads constructed between rural areas and main highway networks in targeted service areas. Increased volume of new water supply put into operation in participating counties. Increased residents connected to potable water supply in targeted service areas.	Measuring physical progress towards achieving project objectives

Township and Village Infrastructure Improvements	Increased number of villages with improved village-level infrastructure (secondary roads, sidewalks, community centers, sanitation systems, water pipes) in targeted service areas).	Measuring progress of supporting improved basic infrastructure services in targeted rural areas
Migrant Training for Transfer and Employment	Number of instructors and school administrators trained	Measuring progress of improving training facilities and enhancing capacities of key personnel in participating training institutions
Community Health Care Services	Increased number of standardized community-level health care facilities put into operation in targeted service areas.	Measuring physical access of PHC services
	Increased number of health workers trained in general practices and licensed in targeted service areas.	Measuring coverage and quality of training planned under the project
Project Management Strengthening	Evidence of satisfactory completion of facilities constructed and equipped under the project.	

				Targe	t Value	S		Data Collecti	ion and Reporting	
Project Outcome Indicators	Baseline* 2010	2011	2012	2013	2014	2015	2016	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Increased population (000) with access to safe drinking water supply in targeted service areas	0	0	0	93	100	106	112	Annual	Project Progress Report	СРМО
Increased population (000) with access to road transportation networks that reduce travel time to main urban county centers	0	0	0	148	181	243	306	دد	ζζ	دد
Increased share (%) of outpatient case load at community level in total case load in targeted service areas	0	3	6	9	12	15	18	دد	ζζ	دد
Increased population (000) with access to primary health care services at the community level in targeted service areas	0	56	112	168	224	280	336			"
Increased number of trainees (000) successfully completed the vocational training programs	0	0	2	4	7	1	13			

# Arrangements for Results Monitoring

Intermediate Outcome Indicators										
Increased number of kilometers of connector roads constructed between rural areas and main highway networks in targeted service areas.	0	1000	30	50	80	90	100.5	Annual	Project Progress Report	СРМО
Increased number and volume (m <sup>3</sup> ) of new water supply systems put into operation in participating counties.	0	10	2000	5000	7000	10000	12800	۰۵		۰۵
Increased number of villages with improved village-level infrastructure (secondary roads, sidewalks, community centers, sanitation systems, water pipes) in targeted service areas	0	0	1	2	3	5	5	دد	cc	۰۵
Number of instructors and school administrators trained	0	50	217	260	300	350	416			

Increased number of standardized community- level health care facilities put into operation in targeted service areas.	0	50	100	320	500	600	734		
Increased number of health workers trained in target service areas.	0	100	500	1000	1200	1300	1360	"	 "
Increased number of general practitioners trained and licensed in targeted service areas.	0	0	0	50	100	150	236	۰۲	 دد

#### **Annex 4: Detailed Project Description**

#### **CHINA:** Chongqing Urban Rural Integration Project

1. The project is composed of five components: (a) Roads and Water Supply; (b) Township and Village Infrastructure Improvement; (c) Migrant Workers' Training for Transfer and Employment; (d) Community Health Care Services; and (e) Institutional Support and Technical Assistance. The following is detailed description of these components.

#### (a) Roads and Water Supply Component (Total Cost: US\$119.68 million)

2. Currently, the main city of Chongqing is experiencing unprecedentedly rapid development, partly due to the construction of advanced transportation networks during the past decade. However, many rural roads in Chongqing are under class IV standard with very poor conditions, which causes great difficulties for people to access health care, education and economic activities. After the construction of new roads with higher travel speed and wider surface, many counties' roads will connect to existing highways or expressways, which will largely increase the population with access to transport networks, reducing travel time to main urban areas. A similar situation applies to the water supply sector in many counties that have difficulties in accessing safe drinking water. After the construction of water treatment plants and associated distribution networks, five counties will be served with more effective and reliable water supply services. In this component, there are respectively four and three subcomponents in road construction and water supply construction as follows:

(i) **Banan District Huiyi Road Expansion**: This sub-component involves the construction of 17.02 km class II road (10 m wide subgrade, 8.5 m wide surface, large-scale bridge 360 m/2, tunnel 600 m/1) and 1.86 km Municipal road (22 m in width) in Huimin township that will connect Huimin township in the north and provide further access to the Chongqing second ring road (currently under construction). It also contains construction of 8 bridges with a total length of 516m, a 600m tunnel and 59 culverts. In the south, the road will join Yuqian (Chongqing – Guizhou) expressway through a connecting road. The first road section of 10.6 km would pass mainly along the existing route with some improvements to sharp curves and steep slopes. The second road section of 6.42 km would be new construction to connect to Nanpeng township. Nanpeng to Yipin road section is under construction using domestic fund. Upon completion of this road, four townships involving 150,000 people would benefit directly.

(ii) **Xiushan County Mie'ao to Liangting Road- Phase 1**: This sub-component involves the construction of class I standard and about 4 km long road (24.5 m wide sub-grade, 18 m wide surface lane from Mie'ao to Yangjiadong which is one section of Mie'ao to Liangting road. The road would be a bypass section of G326 and G319 which currently pass through the township to avoid the congestion to the only two highways (G319 and G326) connecting Xiushan to Chongqing and other parts of China. The phase I section would connect the industrial zone to G319 and further connect to Yuxiang Expressway (under construction). This sub-component also involves construction of Yuhuai Railway Bridge and Meijiang River Bridge, with a total length of 450m, and 12 culverts. Full benefits would be achieved when the phase II section is completed.

(iii) **Tongliang County Townships Municipal Roads:** This sub-component involves five rural roads (25.6km), seven urban roads (5.9 km) totaling 31.5 km, 3 bridges totaling 69m and 27 culverts. With the completion of these roads, six townships would be well connected to the county road and about 300,000 people would be directly served.

(iv) **Yongchuan District Banqiao Township Roads:** This sub-component involves the construction of 13 Class III-IV of roads 46 km long (5.5 m to 7.5 m wide sub-grade). With the completion of this program, the major part of rural road network in Banqiao would be formed. The 13 road sections would cover all 12 administrative villages in the township, and 37,000 people would benefit directly.

(v) **Fengjie County Zhuyi Town Water Supply:** Construction of a 68.15 km and distribution network procurement of a pipeline pump.

(vi) **Shizhu County Huangshui Town Water Supply:** This involves the construction of  $6,000 \text{ m}^3/\text{d}$  capacity water treatment Plant to serve Huangshui Town. It also involves construction of a distribution network of 13.4 km, etc.

(vii) **Xiushan County Water Supply:** This sub-component involves the construction of 3 water treatment plants - Shiye Town 2,000m<sup>3</sup>/day, Rongxi Town 2,500m<sup>3</sup>/day and Longchi Town 3,000m<sup>3</sup>/day, and the construction of water distribution network of 78.0 km.

# (b) Township and Village Infrastructure Component (Total Cost: US\$10.71 million).

3. This component has three sub-components summarized below:

(i) **Qijiang County:** This sub-component covers 3 villages and involves main road of 23.53 km length and 4.5 m width, 3 service centers of 750 m<sup>2</sup> total area, 3 water treatment facilities of  $660 \text{ m}^3/\text{d}$ , about 46 km of pipelines., 3 garbage collecting stations, and 22 garbage collecting points.

(ii) **Wutu Village, Dazhou Town of Wanzhou District:** This sub-component involves five rural roads (class IV) of 4.79 km length and 3.5-6.5 m width, cement concrete pavement, pedestrian path of 20 km length; new construction of one water treatment plant serving people and animals  $(300m^3/d)$ , including 1.36 km storm and sewage pipelines.

(iii) **Chengkou County:** This sub-component involves road of 6.2 km length (new construction of 2.8 km), reconstruction of 3.4 km ; two water storage tanks with total capacity of  $220\text{m}^3/\text{d}$ , truck supply pipe of 5.5 km, branches 60 km; and a community service center of 700 m<sup>2</sup>

# (c) Migrant Workers' Training for Transfer and Employment Component (Total Cost: US\$13.91 million)

4. The objective of the component is to expand access to and improve quality of training for rural migrants and enhance their employability. Four training institutions were selected by the government to explore the school-level reform as a pilot. The lessons of the pilot are expected to be scaled up to other training institutions by capturing the lessons through monitoring and evaluation. All four training institutions are public schools which received financial support from national, municipal transfer fund or earmarked fund, and county level budgetary investment outfits.

5. This component will support expanding access and improving quality of training for rural migrants to enhance their employability by, inter alia, carrying out the following in selected educational institutions: (a) strengthening school-industry linkages through workshops and consulting services; (b) providing equipment and upgrading buildings and workshops to facilitate delivery of training programs; (c) introducing modular, competence-based curriculum to increase the quality and relevance of training; (d) providing teacher training to improve the quality of instruction; (e) developing new assessment methods to test and clarify competencies acquired by trainees; (f) improving school and project management through capacity building and monitoring and evaluation activities; and (g) providing technical assistance for capacity building of training institutional monitoring and evaluation, tracer studies and employer surveys, all to improve overall school management.

6. The four sub-components of this component are as follows:

(i) **Yubei District Employment Transfer Training Base for Rural Migrant Workers:** This sub-component includes equipment and book purchases, curriculum development, instructor and administrator training, test development through strengthened school-industry linkages, and project M&E.

(ii) **Wushan County Employment Transfer Training Base for Rural Migrant Workers:** This subcomponent involves training equipment purchases to improve the condition of Wushan Training Center and supporting training networks down to the township levels. Through strengthened school-industry linkages, competence-based training program will be developed, instructors and school administrators will be trained, and school and project management will be improved.

(iii) **Shizhu County Vocational Training Base for Rural Migrant Workers:** This subcomponent involves equipment purchases, curriculum development, instructor and administrator training, test development, improved school and project management through strengthened school-industry linkage and project M&E.

(iv) **Chongqing Technology and Business University Training Base for Rural Migrant Workers:** This sub-component involves equipment and book purchases, facility improvement; curriculum development, instructor and administrator training, test development, project management through project M&E. In addition, the university will provide technical support for other training institutions.

# (d) Community Health Care Services Component (Total Cost: US\$43.65 million).

7. This component will help improve equity in the primary health care services and finance:

Equipment for village health clinics and urban community health centers, improving equity of access to services at the lower levels of the health care system as well as improving efficiency by strengthening cost-effective levels of care; (ii) constructing and equipping of a new integrated care delivery and management organization including a county hospital and associated 10 community health centers in Yubei District. The Yubei subcomponent will introduce a new management/organization model which could improve both efficiency and equity in the sector. The component will also (iii) finance training of health care staff at grass roots level on primary care services, standards and protocols, hospital infection control, and health care services' management; and (iv) develop policy studies and pilot intervention designs on both the supply-side (providers) and demand-side (consumers) to promote equitable health services, and optimization of health care resources. Specifically this component will finance the:

(i) Equipping of about 687 village clinics and 37 urban Community Health Care Centers by providing medical and other equipment, and training required for health care services.

(ii) Expanding of a hospital in Yubei District by constructing hospital facilities on a new site, and providing medical, and other equipment.

# (e) Institutional Support and Technical Assistance (Total Cost: US\$ 1.99 million).

8. This component will help project implementation by supporting consulting services: (i) to enhance the design, review, and certification of works carried out under the project; (ii) to strengthen the capacity of the Project Implementation Entity (Chongqing) at the municipal and county level in the areas of project management, procurement and contract management, accounting and financial management, and compliance with safeguard policies; and (iii) to conduct a policy study on a O&M mechanism for public utilities in rural areas.

# Annex 5: Project Costs

# **CHINA:** Chongqing Urban Rural Integration Project

# **Project Costs by Component**

Components/ Sub-components	Cost	in US\$ m	illion
	IBRD	Count erpart Fund	Total
Total Project Costs	84	109.15	190.15
Component 1 - Roads and Water Supply			
(i) Banan District Huiyi Road Expansion	12.34	26.6	38.94
(ii) Xiushan County Mie'ao to Liangti Road - Phase 1	6.88	7.42	14.3
(iii) Tongliang County Townships Municipal Roads	11.71	13.01	24.72
(iv) Yongchuan District Banqiao Town Roads	9.06	15.68	24.74
(v) Fengjie County Zhuyi Town Water Supply	3.42	4.01	7.43
(vi) Shizhu County Huangshui Town Water Supply	1.52	1.75	3.27
(vii) Xiushan County 3 Towns Water Supply	2.84	3.44	6.28
<b>Component 2 - Township and Village Infrastructure In</b>		1	
(i) Qijiang County Basic Services Improvement	2.7	3	5.7
(ii) Wutu Village, Dazhou Town of Wanzhou District	0.44	0.52	0.96
Basic Services Improvement			
(iii) Chengkou County Basic Services Improvement	1.85	2.2	4.05
Component 3 - Migrant Workers' Training for Transf	er and Em	ployment	;
(i) Yubei District Employment Transfer Training Base	1.52	1.55	3.07
(ii) Wushan County Employment Training Base	1.61	1.17	2.78
(iii) Shizhu County Vocational Training Base	1.96	1.34	3.30
(iv) Chongqing Technology and Business University	1.78	2.98	4.76
Component 4 - Community Health Care Services	I	1	
(i) Construction and Equipment of Yubei District	13.76	21.49	35.25
hospital	6.00	0	6.00
(ii) Equipment of 687 Village Clinics and 37 Urban	6.09	0	6.09
Community Health Care Centers	1.07	0	1.07
(iii) Capacity Building and Training for Village Clinics	1.87	0	1.87
and Urban Community Health Care Centers	0.45	0	0.45
(iv) Others (policy study and operation cost)	0.45	0	0.45
Component 5 - Institutional Support and Technical As		0	1.04
(i) Project Management and Capacity Building for PMOs and PIUs	1.94	0	1.94
(ii) Policy Study	0.05	0	0.05
(iii) Design Review and Certification Service*	0	0	0.8
Front-end Fee	0.21	0	0.21
Total Financing	84	106.16	190.16

Note: Design Review and Certification will be paid through the exiting Chongqing Small Cities Infrastructure Improvement Project (P081161)

Category		Cost in	US\$ million
	IBRD	Count	Total
		erpart	
(i) Civil Works	63.87	43.31	107.18
(ii) Equipment and Goods	14.28	5.91	20.18
(iii) Consultant Services	1.06	0.07	1.13
(iv) Training & Study Tour	2.46	0.29	2.75
(v) Workshop/Seminar	0.14	0.06	0.20
(vi) Engineering Design and Resettlement		56.52	56.52
(vii) Project Management for PMO and PIUs	1.99		1.99
Total Cost	83.79	106.16	189.95
Front-end Fee	0.21		0.21
Total Financing	84.00	106.16	190.16

# **Project Cost by Category**

# Annex 6: Implementation Arrangements CHINA: Chongqing Urban Rural Integration Project

1. CMG established a project leading group at the Municipal level, headed by a Vice Mayor, to oversee the preparation of the proposed project. Representatives from Chongqing Development and Reform Commission (DRC) and Chongqing Finance Bureau (FB) are designated as deputy Directors of the Leading Group. In addition, the Leading Group is staffed with the representatives of Chongqing Health Bureau, Chongqing Labor & Social Security Bureau, Chongqing Education Commission, Chongqing Construction Commission, Chongqing Agricultural Commission, Office of Foreign Affairs of CMG, and Finance Office of CMG. The Leading Group takes responsibility for organizing, coordinating, providing guidance and overseeing project management and operation.

2. A leading group at each city/district/county level was also set up, led by the respective head of the county or district, which has a similar structure as the Municipal leading group. The Leading group, under the guidance of the CPMO, will be responsible for reviewing project design, coordinating mobilization of counterpart funds and payment of loan proceeds, helping to settle any critical issues encountered during project implementation, overseeing project implementation, and engineering completion acceptance.

3. The Municipal Leading Group nominated the existing Chongqing PMO to coordinate the preparation activities of city/district/county proposed investments. CPMO has previous experience in coordinating preparation and implementation of WB-financed projects (such as the CUEP and CSCP). CPMO, as the focal point of contact, will monitor implementation progress, including procurement activities, consolidate project costs and prepare consolidated semi-annual progress reports. It will be responsible for implementation of the technical assistance and capacity building component.

4. Project Implementing Units (PIUs) at the city/district/county levels have been established to carry out the day-to-day subproject preparation and implementation. All the PIUs are existing state-owned commercial enterprises and public services units.

5. CPMO will recruit the services of independent specialist consultants to: certify compliance with agreed design criteria, design principles and cost estimations for subcomponents to pass eligibility criteria, and for independent construction supervision arrangements. The independent specialist consultants' services will be expanded to certify compliance of the agreed RAPs and EMPs with the Bank environmental and social safeguards.

6. Based on experience emerging from the supervision of the existing projects in Chongqing, CPMO and Bank team agree that further strengthening of the CPMO and PIUs is needed. All implementing agencies are owned by either Chongqing Municipality or the participating cities/districts/counties, which are empowered to borrow and repay loans. Strengthening of CPMO capacity will include improving skills in the areas of project management, procurement, contract management, disbursement, implementation of safeguard and fiduciary measures, and monitoring and reporting.

Component 1 – Roads and Water Supply	Project Owner/Implementing Agency & Type of	Responsibility for Management, O&M	Repayment Responsibility	& Subsidiary Loan Agreement (SLA) Requirement	Date of <u>Charter</u>	Business <u>License Number</u>	Date of <u>Business License</u>
<ul><li>(i) Banan District Huiyi Road Expansion</li></ul>	Company Chongqing Banan Road Construction Co., Ltd Liability Ltd.(SOE)	Chongqing Banan Road Maintenance Unit	Repayment by Banan District Finance Bueau		August 25, 2008	500113000011058	October 29, 2008
(ii)Xiushan County Mie'ao to Liangti Road - Phase 1	Xiushan Huaxin Assets Management Co., Ltd. Liability Ltd.(SOE)	local public facilities management office	Repayment by Xiushan County Finance Bureau		September 13, 2006	500241000000981	May 27, 2008
(iii)Tongliang County Townships Municipal Roads	Tongliang County Jinlong City Construction Investment Company Liability Ltd.(SOE)	local public facilities management office	Repayment by Tongliang County Finance Bureau		March 6, 2006	500224000003838	December 30, 2008
(iv)Yongchuan District Banqiao Town Roads	Yongchuan Zhengxin State-owned Assets Management Co.Ltd Liability Ltd.(SOE)	local public facilities management office	Repayment by Yongchuan District Finance Bureau		September 29, 2009	500383000004085	March 9, 2009
(v)Fengjie County Zhuyi Town Water Supply	Fengjie Hongan Investment Co., Ltd. Liability Ltd.(SOE)	Fengjie Water Supply Company	Repayment by Fengjie Hongan Investment Co., Ltd.	SLA required between Fengjie Hongan Investment Co., Ltd. and Fengjie County Finance Bureau	July 18, 2007	500236000000765	January 9, 2008
(vi)Shizhu County Huangshui Town Water Supply	Shizhu County Water Resources and Power Development Company SOE	Shizhu County Water Resources and Power Development Company	Repayment by Shizhu County Water Resources and Power Development Company	SLA required between Shizhu County Water Resources and Power Development Company and Shizhu County Finance Bureau	January 13, 1999	5002401800129	April 19, 1999
(vii)Xiushan County 3 Towns Water Supply	Xiushan County Water Resources Bureau	Xiushan County Yutong Township Water Supply Co. Ltd., <b>Liability</b>	Repayment by Xiushan County Yutong Township Water Supply Co. Ltd	SLA required between Xiushan County Yutong Township Water	December 16, 2008	500241000002995	December 29, 2008

7. The following table indicates responsibilities and functions of each implementing agency.

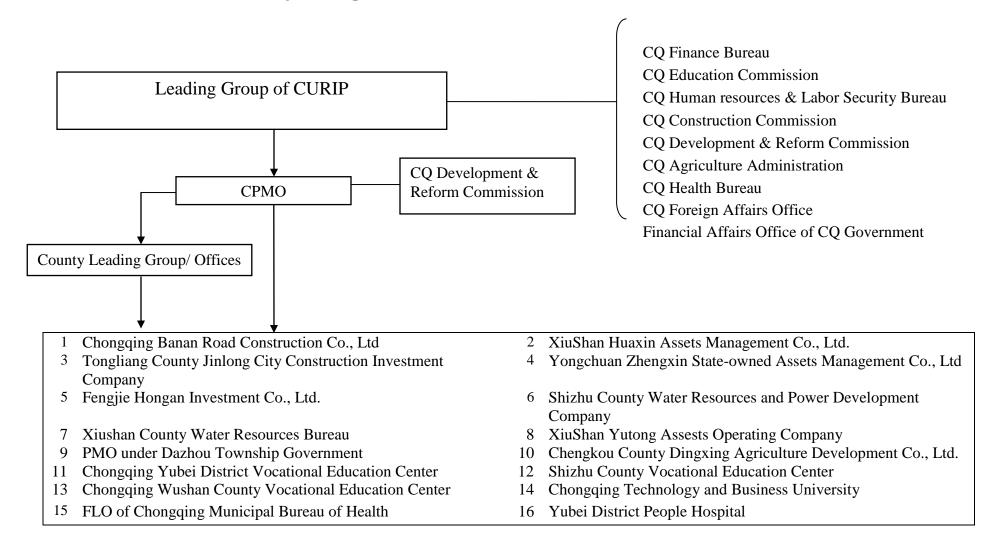
			Supply Co. Ltd. And Xiushan County Finance Bureau				
Component 2 - Township and Village Infrastructure Improvement	Project Owner/Implementing Agency	Responsibility for Management, O&M	Repayment Responsibility & Subsidiary Loan Agreement (SLA) Requirement		Date of <u>Charter</u>	Business <u>License Number</u>	Date of <u>Business License</u>
(i) Qijiang County Basic Services Improvement	Chongqing Yunan Assets Operating Company Liability Ltd.(SOE)	After project completion, rural drinking water project will be transferred to local authority for management; newly- built roads will be transferred to relevant department; and village service center, waste treatment station will be managed by those villages.	Repayment by Qijiang County Finance Bureau		September 20, 2007	5002220000113 09	February 12, 2009
(ii) Wutu Village, Dazhou Town of Wanzhou District Basic Services Improvement	PMO under Dazhou Township Government	relevant government departments	Repayment by Wanzhou Township Finance Bureau		n.a	n.a	n.a
(iii) Chengkou County Basic Services Improvement	Chengkou County Dingxing Agriculture Development Co., Ltd. Liability Ltd.(SOE)	After project completion, newly-built roads will be transferred to relevant department for management; and village service center, waste treatment station will be managed by those villages.	Repayment by Chengkou County Finance Bureau		May 17, 2006	5002291800076	April 2, 2003
Component 3 - Migrant Workers' Training for Transfer and Employment	Project Owner/Implementing Agency	Responsibility for Management, O&M	Repayment Responsibility & Subsidiary Loan Agreement (SLA) Requirement		Approval <u>Authority</u>	Approval <u>Date</u>	Certificate <u>No.</u>
(i) Yubei District Employment Transfer Training	Chongqing Yubei District Vocational Education Center	Chongqing Yubei District Vocational Education Center	Repayment by Yubei District Vocational Education Center;	SLA required between Yubei District Vocational	Chongqing Municipal	November 27, 1998	150011200351

Base				Education Center and Yubei District FB	Education Commission		
(ii) Wushan County Employment Training Base	Chongqing Wushan County Vocational Education Center	Chongqing Wushan County Vocational Education Center	Repayment by Wushan County Vocational Education Center	SLA required between Wushan County Vocational Education Center and Wushan County FB	Chongqing Municipal Education Commission	July 16, 2004	150023700321
(iii) Shizhu County Vocational Training Base	Shizhu County Vocational Education Center	Shizhu County Vocational Education Center	Repayment by Shizhu County Vocational Education Center	SLA required between Shizhu County Vocational Education Center and Shizhu County FB	Chongqing Municipal Education Commission	April 2004	150024000374
(iv) Chongqing Technology and Business University	Chongqing Technology and Business University	Chongqing Technology and Business University	Repayment by Chongqing Technology and Business University	SLA required between Chongqing Technology and Business University and Chongqing FB		January 14, 2002	15000000751
Component 4 - Community Health Care Services	Project Owner/Implementing Agency	Responsibility for Management, O&M	Repayment Responsibility & Subsidiary Loan Agreement (SLA) Requirement		Approval <u>Authority</u>	Approval <u>Date</u>	Certificate <u>No.</u>
(i) Construction and Equipment of 1000 Village Clinics and 40 Urban Health Institutions	FLO of Chongqing Municipal Bureau of Health	FLO of Chongqing Municipal Bureau of Health	Repayment by Chongqing Municipal Finance Bureau		n.a	n.a	n.a
(ii) Construction and Equipment of Yubei District hospital	Yubei District People Hospital	Yubei District Health Bureau	Repayment by Yubei District Finance Bureau		Chongqing Municipal Yubei District Health Bureau	n.a	150011200105
Component 5 – Progject Management Strengthening	Project Owner/Implementing Agency	Responsibility for Management, O&M	Repayment Responsibility & Subsidiary Loan Agreement (SLA) Requirement				
(i) Project Management	CPMO / PIUs	CPMO / PIUs	Repayment by respective counties' and districts' finance bureaus; no SLA		n.a	n.a	n.a

8. Loan proceeds will be provided to the People's Republic of China, through the Ministry of Finance, which in turn will make the loan proceeds available, through Chongqing Finance Bureau, to the relevant city/district/county governments on the same terms and conditions as the Bank loan to China with a 25-year maturity, including an eight-year grace period. The financial statements of the project should be audited annually as satisfactory to the Bank.

9. The structure of institutional arrangements are shown in the following chart:

# **Project Organizational Structure Chart of CURIP**



# Annex 7: Financial Management and Disbursement Arrangements CHINA: Chongqing Urban Rural Integration Project

#### **Executive Summary**

1. The Bank team has conducted an assessment of the adequacy of the project financial management system surrounding the Chongqing Urban Rural Integration Project (CURIP). The assessment, based on guidelines issued by the Financial Management Sector Board on November 3, 2005, has concluded that the project meets the minimum Bank financial management requirements, as stipulated in BP/OP 10.02. In the Bank's opinion, the project will maintain adequate financial management arrangement acceptable to the Bank and, as part of the overall arrangements that the borrower has in place for implementing the operation, provide reasonable assurance that the proceeds of the loan will be used for the purposes for which the loan is granted. Financial management (FM) risk is the risk that World Bank loan proceeds will not be used for the purposes intended and is a combination of country, sector and project specific risk factors. Taking into account the risk mitigation measures proposed under this project, a "Moderate" FM risk rate was assigned to the project at the appraisal stage.

2. Funding sources for the project include the Bank loan and counterpart funds. Bank loan proceeds will directly flow into a project designated account (DA) to be set up at, and managed by, Chongqing Finance Bureau (CFB). The Bank loan will be signed between the Bank and the People's Republic of China through its Ministry of Finance (MOF), and on-lending arrangements for the Bank loan will be signed between MOF and the Chongqing Municipal Government, through its CFB, and then between CFB and relevant city/district/county governments through their respective finance bureaus. Finally, on-lending arrangements will be signed between these city/district/county finance bureaus and implementing entities. Counterpart funds are comprised of local government appropriations and domestic financing.

# **Country Issues**

3. To date, no country financial accountability assessment (CFAA) has been carried out by the Bank for China. The Bank's knowledge of the system is however fairly comprehensive, thanks to several studies carried out by the Government and others.3 Based on the studies and material produced by others, Bank observations of developments in the areas of public expenditures, accounting and auditing, and Bank experience with China projects for the past several years, the Bank has noted that substantial achievement have been made in the aforementioned areas and further improvement is expected in the next few years. This is a work in progress and as economic reform program further unfolds, the Government has come to realize the importance of establishing and maintaining an efficient and effective market

OECD Challenges for China's Public Spending Chapter 1

<sup>&</sup>lt;sup>3</sup> Financial Management and Governance Issues in China (ADB 2000)

Public Sector Management Issues in China (Christine Wong 2005)

Government Budgeting and Accounting Reforms in China (Lou Jiwei 2001)

WB China Provincial Public Expenditure Review (Christine Wong 2000)

WB 2000 (Country Economic Memorandum) managing Public Expenditures for Better Results

mechanism to ensure transparency and accountability, and minimize potential for fraud or corruption.

4. Due to rather unique arrangement by the Government of China, funding (particularly for Bank loan/grants) of Bank projects is controlled and monitored by MOF and its extension at the sub-national level (i.e., finance bureaus at provincial, municipal/prefecture and county level). However, project activities are usually carried out by implementing entities of a specific industry or sector due to the level and complexity of expertise involved. While this segregation of duties provides added fiduciary assurance, the above arrangement then usually requires more coordination, as the multi-level management of the funding and implementation mechanism sometimes works to the detriment of smooth project implementation.

# **Summary Project Description**

5. The development objective of the proposed project is to increase access of residents in participating counties and districts to improved public services, including roads, water supply, employment training, and primary health care. For detailed project description, please refer to Annex 4.

# Audit Arrangements

6. The Bank requires that project financial statements be audited in accordance with standards acceptable to the Bank. In line with other Bank financed projects in China, the project will be audited in accordance with International Auditing Standards and the Government Auditing Standards of China. Chongqing Municipal Audit Office (CMAO) has been identified as auditors for the project. Annual audit reports will be issued by CMAO. The Bank currently accepts audit reports issued by China National Audit Office (CNAO) or provincial/regional audit bureaus/offices for which CNAO is ultimately responsible.

7. The annual audit report of project financial statements will be due to the Bank within 6 months after the end of each calendar year. This requirement is stipulated in the loan agreement. The responsible agency and timing are summarized as follows:

Audit Reports	Submitted by	Due date
Project consolidated financial statements	СРМО	June 30 of each calendar
		year

# **Risk Assessment and Mitigation**

8. The following risks, with corresponding mitigating measures, have been identified during the assessment:

Risk	Risk Rating Before Mitigating Measures	Incorporated Risk Mitigating Measures	Risk Rating After Mitigating Measures	Conditions of Negotiations, Board or Effectiveness
Inherent Risk Country level	Moderate	Continuous dialogue with related government entities and technical assistance from the Bank will help the government to improve its public sector financial management. In short-term, annual audit requirements will reduce the risk that project funds are not used for their intended purposes. For those areas where government system cannot be used, Bank's specific requirements will be embedded into project financial management system.	Moderate	N
Entity Level	Significant	Most of the PIUs at city/district/county level have no experience with the Bank financed projects. However, Chongqing Municipal PMO (CPMO) and CMFB are experienced with the Bank financed operations. Therefore, close monitoring and guidance from CPMO and CMFB as well as the Bank's regular supervision, to some extent, can mitigate this risk. In addition, well-designed FM manual (FMM) and training sessions will be provided to all project financial staff before and during the project implementation.	Moderate	FMM needs to be finalized by negotiation (completed)
Project Level	Substantial	The project will spread across 16 cities, counties and districts and cover diverse sectors including transport, water, health, labor and education. As such, a well designed FMM is required to unify and standardize the project financial management and disbursement arrangements at each project implementing agencies.	Moderate	N
Control Risk Budgeting	Significant	The FMS will work with each PIU to improve their budgeting, execution and monitoring.	Moderate	N

Accounting	Significant	Accounting policies and procedures are	Moderate	N
C	0	already in place. Circular #13 has been		
		issued by MOF and adopted for all World		
		Bank financed projects. Such circular will		
		be documented in project FMM for all		
		parties to follow. Well-designed training		
		workshop will be provided to all financial		
		staff before project start.		
Internal	Significant	Detail internal controls procedures	Moderate	
Control		including segregation of duties, review and		Ν
		approval procedures, safeguard assets are		
		in place within each PIU. The Bank's task		
		team will review actual practice during		
		project implementation.		
Funds Flow	Moderate	The Bank loan proceeds will be managed	Low	Ν
		and monitored through the finance bureau		
		channels and all disbursement requests will		
		be subject to their substantive reviews. The		
		funds flow arrangement is straight forward		
		and approval processes have been		
		streamlined. To avoid delayed		
		disbursement, related requirements and		
		procedures will be documented in the		
		FMM and require all agencies to follow.		
Financial	Moderate	The format and content of financial	Moderate	Ν
Reporting		statements have been stipulated by MOF.		
		The project FMM will specify the format,		
		content and timing requirements for such		
		financial reporting. The CPMO will		
		consolidate the project financial statement		
		with the assistance of CMFB.		
Auditing	Moderate	The external auditor, CMAO has extensive	Low	Ν
		experience with previous Bank projects.		
Overall	Significant		Moderate	

9. The overall FM risk-rating assigned to this project at the appraisal stage was moderate, provided the proposed mitigating measures are carried out. The FMS will monitor the effectiveness of the measures and FM risk during project implementation.

#### **Fund Flow and Disbursement Arrangements**

10. Four disbursement methods advance, reimbursement, direct payment and special commitments are available for the project. Supporting documents required for Bank disbursements under different disbursement methods are documented in the Disbursement Letter issued by the Bank. Applications will be supported by:

• For reporting eligible expenditures paid from the Designated Account (DA) and requesting reimbursement:

(a) List of payments against contracts, together with records evidencing eligible expenditures (e.g., copies of receipts, supplier invoices) for the contracts subject to the Bank's prior review indicated in the table below;

(b) Statement of Expenditure in the form detailed in the Disbursement Letter for all other expenditures / contracts not subject to the Bank prior review.

• For requests for Direct Payment: records evidencing eligible expenditures, e.g., copies of receipts, supplier invoices.

11. The Bank loan would be disbursed against eligible expenditures (taxes inclusive) as in the following table:

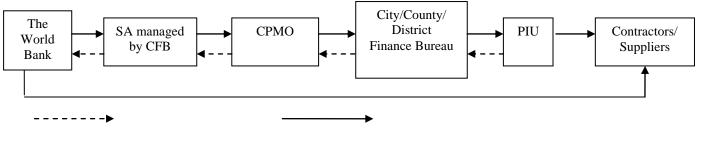
Category	Amount of the Loan Allocated (expressed in Dollars)	Percentage of Expenditures to be financed (inclusive of Taxes)
1) Civil Works	63,870,000	60%
2) Goods and Equipment		
(a)Under Part 4 (a) of the Project in Loan Agreement	6,090,000	100%
(b) Under Parts 3 and Part 4 of the Project in Loan Agreement	8,170,000	60%
3) Consultancy Service & Training*	5,660,000	100%
4) Front-end Fee	210,000	
TOTAL AMOUNT	84,000,000	

\*"Training" means for purposes of Section IV of Schedule 2 to the Loan Agreement, the reasonable cost of travel, lodging and per diem for trainees attending training, study tours, workshops and seminars and the cost of delivering training (excluding consultant fees) such as rental of training space and training equipment and other logistic costs.

Retroactive financing will be applied for payments made for project expenditures under categories (1),(2) and (3) before the signing date of loan agreement but on or after May 1, 2010. The amount for retroactive financing is up to USD8,100,000. Activities eligible for retroactive financing have been identified and appear in the procurement plan.

12. One segregated designated account (DA) in US dollar will be opened at a commercial bank acceptable to the Bank and will be managed by CFB. The ceiling of the DA is documented in the Disbursement Letter.

13. CFB will be directly responsible for the management, maintenance and reconciliation of the DA, Supporting documents required for Bank disbursements will be prepared and submitted by each PIU, through the respective finance bureau to CPMO, for approval and verification before sending to CFB for further processing. The flow of funds and withdrawal applications (WAs) are as follows:



WAs Flow

Funds Flow

# Budgeting

14. The budgeting system within the project is usually not well maintained or monitored. In order to ensure that the project activities could be implemented as planned, each PIU will conduct variance analysis semi-annually. To make sure that the counterpart funds could be appropriated in a timely manner during project implementation, the counterpart funds availability will also be reflected in the budgeting report. A standardized project progress report has been designed for the project. The FMS will work with the related entities to improve their budgeting system during project implementation.

# Accounting

15. The administration, accounting and reporting of the project will be set up in accordance with the Circular #13: "Accounting Regulations for World Bank Financed Projects" issued in January 2000 by MOF. The circular provides in-depth instructions of accounting treatment of project activities and covers the following:

- Chart of account
- Detailed accounting instructions for each project account
- Standard set of project financial statements
- Instructions on the preparation of project financial statements

16. The standard set of project financial statements mentioned above has been agreed between the Bank and MOF and applies to all Bank projects appraised after July 1, 1998 and includes the following:

- Balance sheet of the project
- Statement of sources and uses of fund by project components
- Statement of implementation of loan agreement
- Statement of designated account
- Notes to the financial statements

17. The CPMO and each PIU will be managing, monitoring and maintaining their respective project accounting records for the components they execute. Original supporting documents for project activities will be retained by the CPMO and PIUs. The PIUs will prepare their own financial statements, which will then be submitted to, and reviewed and consolidated by, the CPMO before submission to the Bank for review and comment on a regular basis.

18. Adequate project accounting staff with educational background and work experience commensurate with the work they are expected to perform is one of the factors critical to successful implementation of project financial management. Based on discussions, observation and review of educational background and work experience of the staff identified for financial and accounting positions in CPMO and each PIU, the task team noted that they are qualified and appropriate to the work they are expected to assume. Well-designed training sessions will be provided to all project financial staff before project implementation to furnish them Bank's financial management requirements and disbursement procedures. In addition, during implementation, their capacities will be further strengthened through Bank's review and supervision of their financial work.

19. To strengthen financial management capacity and achieve consistent quality of accounting work, the task team has required that a project Financial Management Manual (FMM) be prepared. The FMM will provide detailed guidelines on financial management, including internal controls, accounting procedures, fund and asset management, withdrawal application procedures, financial reporting, auditing arrangement, and etc. As agreed with CPMO and CFB, the FMM was finalized before project negotiation and will be distributed to all the relevant financial staff before project start-up.

20. Each PIU will individually decide whether they would utilize computerized financial management information system or manually record and maintain the project accounting books. The task team will monitor the accounting process, especially during the initial stage, to ensure complete and accurate financial information will be provided in a timely manner.

#### **Internal Control and Internal Auditing**

21. The related accounting policy, procedures and regulations have been issued by MOF. The FMM, which will include all these regulations, will be prepared and issued to uniformly align the financial management and disbursement requirements among CPMO, CFB and PIUs.

22. There is no formal independent internal audit department for the project. However, this will not impact on the project's financial management as the management and monitoring from various levels of finance bureaus and CPMO (which will review the withdrawal applications),

and annual external audit will serve as the mechanism to ensure that financial management controls are functioning appropriately.

## **Financial Reporting**

23. The format and content of project financial reports have been agreed between the Bank and CPMO and CFB. As agreed, the interim financial reports will be prepared and submitted to the Bank for review on a semi-annual basis.

24. Each PIU will prepare project financial statements for their components, which will then be used by CPMO for preparing consolidated project financial statements and submitted to the Bank for review and comment on a regular basis. Unaudited semi-annual interim consolidated project financial statements should be prepared and furnished to the Bank by CPMO no later than 45 days after the end of June and December of each year, in form and substance satisfactory to the Bank.

## **Financial Covenants**

25. No specific financial covenants are applicable to the project except for standard financial covenants, such as project audit and interim financial reports.

## **Supervision Plan**

26. Supervision strategy for this project is based on its FM risk rating (which will be evaluated on regular basis by the FMS, in consultation with relevant task team leader).

# Annex 8: Procurement Arrangements CHINA: Chongqing Urban Rural Integration Project

## A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004, revised October 2006; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised October 2006 and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

2. **Procurement of Works**. Works procured under this project would include in: Component 1- roads and water supply in Banan, Xiushan, Tongliang, Yongchuan, Fengjie,and Shizhu county/district; Component 2 - Township and Village Infrastructure Improvement in Qijiang, Wanzhou and Chengkou County/district; Component 3 - Migrant Workers' Training for Transfer and Employment in Chongqing Technology and Business University; and Component 4 - Community Health Care Services in Yubei District Hospital. Since each contract is less than US\$20 million, the works will be procured through NCB procedure. The procurement will be done using the MOF's Model Bidding Documents (MBD) agreed with the Bank for all NCB contracts above USD300,000 each.

3. **Procurement of Goods.** Goods procured under this project would include: education equipment in Component 3 - Migrant Workers' Training for Transfer and Employment in Yubei District Employment Transfer Training Base, Wushan County Employment Training Base, Shizhu County Vocational Training Base, and Chongqing Technology and Business University; and medical equipment in Component 4 - Community Health Care Services in 687Village Health Clinics, 37 community Health centers, 20 town health centers in 6 counties/districts in Chongqing, and Yubei District Hospital. Procurement will be done using the Bank's SBD for 1 ICB contract for air conditioning system of Yubei District Hospital (since the contract is above ICB threshold of US\$1 million) and MBD agreed with the Bank for all NCB contracts above US\$150,000 each through Shopping procedure.

4. **Selection of Consultants.** Consulting services from firms and individuals required for the project are Study on education of migrant workers, healthcare reform and an O&M mechanism for utilities, and project management and construction supervision. Short lists of consultants for services estimated to cost less than US\$300,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph

2.7 of the Consultant Guidelines. Engaging universities, government research institutions, public training institutions, NGOs, or any special organizations shall follow Paragraph 1.11 of the consultant Guidelines. QCBS/QBS will be used for contracts above US\$200,000, CQS will be used for contracts less than US\$200,000, and SSS may be used with Bank prior approval.

# B. Assessment of the agency's capacity to implement procurement

5. Procurement activities will be carried out by each Implementing Agency in the project county/utility. CPMO has designated the deputy director of CPMO to be in charge of coordination and management of project procurement. The deputy director was involved with the Bank-financed CSCP and has experience in procurement management of World Bank projects.

6. All PIUs have knowledge of local procurement procedures and some of them have carried out bidding. Detailed procurement staffing of the PIUs are proposed as follows:

- (i) Each PIU has designated at least three persons to be responsible for procurement management. Most of these staff have experience organizing procurement under national procurement procedures; however, they lack experience with WB procurement policies.
- (ii) International and local consultants will be employed to provide technical assistance for the project management, including procurement management.
- (iii) Each PIU will recruit an experienced tendering company as procurement agent for the project. The tendering companies will work closely with the CPMO and PIUs.

7. An assessment of the capacity of PIUs to implement procurement actions has been carried out by the Bank procurement specialist in June 2009. The assessment reviewed the organizational structure for implementing the project and the interaction between the project's staff responsible for procurement at different levels.

8. The key issues and risks concerning procurement for have been identified and are included in the Procurement Capacity Assessment Report (PCAR). Corrective measures which have been agreed appear in PCAR and are contained in the Project Files.

9. The overall project risk for procurement is Substantial.

# C. Procurement Plan

10. CPMO, at appraisal, developed a procurement plan for project implementation which provides the basis for the procurement methods. This plan has been agreed between the Municipality and the Bank and is available at the project office in Chongqing. It is also be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect actual project implementation needs and improvements in institutional capacity.

# **D.** Frequency of Procurement Supervision

11. In addition to prior review to be carried out from Bank offices, the capacity assessment has recommended supervision missions to visit the field to carry out post review at least once a year.

## E. Details of the Procurement Arrangements

## 12. Goods, Works, and Consulting Services

#### (a) Thresholds for Procurement Methods and Bank Review

		Procurem	ent Method	l Threshold	1	Bank Review Threshold	
	ICB	NCB	Shoppin g	QCBS/ QBS	CQS	Prior	Post
Works, Supply and installation of Plant and Equipment	>\$20 million	<\$20 million	<\$300K			>\$4 million	<\$4 million
Goods	>\$1 million	<\$1 million	<\$150K			>\$300K	<\$300K
Consulting firm	>\$300 K			>\$200K	<\$200K	>\$150k	<\$150k
Consulting individual						No prior review	All post review
Single Source Selection for firm and individual consultants						All subject to prior review	All subject to prior review

(b) List of contract packages to be procured under the project:

#### Procurement Plan for Chongqing Urban Rural Integrated Project

Goods, Works and Consulting Services

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		Notes (Implementation Agency/Retroactive Financing)
A. Rural Urbai	n Infrastructure	Platform Building								
. Road Compo	onents									
Banan Road										
1	BNRD1	LK0+000~LK1+861.961, Reconstruction of Huimin Township Linkage Road (LK0+000~ LK1+861.961), from Huimin market- town( Huimin Bridge) to connection line of Huiyi Road, urban sub-trunk road, grade II, 1.86km length,	23.02	3.39	NCB	Post	20107	2010.10	12	Chongqing Banan Road Construction Co., Ltd
2	BNRD2	Reconstruction of Huiyi Road (K0+000~ K10+000),grade II, 10 km length, road foundation width 10m, 4 small bridges, 1 large bridge.	53.09	7.81	NCB	Prior	2010.7	2010.10	12	Chongqing Banan Road Construction Co., Ltd
3	BNRD3	Reconstruction of Huiyi Road (K10+000~K17+020), grade II, 7.02km length, road foundation width 10m, tunnel 600m/1, 2 small bridge, 1 large bridge, concrete surface	63.69	9.37	NCB	Prior	2010.7	2010.10	12	Chongqing Banan Road Construction Co., Ltd
		Subtotal	139.80	20.56						
		Land acquisition ,resettlement, design, supervision, project management etc.	124.99	18.38	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	264.79	38.94						

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date	Expected Duration (in Months)	Notes (Implementation Agency/Retroactive Financing)
4	YCRD1	Reconstruction of #1(6km), #4(3.47km) #9(6.19km) and #10(2.477km) roads and ancillary works, Grade IV, expansion and renovation of appurtenant works, 6m Width, concrete surface	26.93	3.96	NCB	Prior	2010.7	2010.10	12	Yongchuan Zhengxin State- owned Assets Management Co.Ltd
5	YCRD2	Reconstruction of #3(2.71km), #6(6.54km), #11(2.7km, including 1 small bridge) and #12(2.464km) roads and ancillary works, Grade IV, 6m Width, concrete surface	23.35	3.43	NCB	post	2010.10	2011.1	12	Yongchuan Zhengxin State- owned Assets Management Co.Ltd
6	YCRD3	Reconstruction of #2(2.853km)road and ancillary works, Grade III, 6.5m width. Reconstruction of #5(3.827km) and #13(2.555km) roads and ancillary works, Grade IV, 6.5m wide	13.79	2.03	NCB	post	2010.10	2011.1	12	Yongchuan Zhengxin State- owned Assets Management Co.Ltd
7	YCRD4	Construction of #7(2.447km) and #8(1.77km, including 2 small bridges) roads and ancillary works, Grade III, 6.5M width, , concrete surface	13.89	2.04	NCB	post	2010.10	2011.1	12	Yongchuan Zhengxin State- owned Assets Management Co.Ltd
		Subtotal	77.96	11.46						
		Land acquisition ,resettlement, design, supervision, project management etc.	19.31	2.84	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	97.27	14.30						
Tongliang Roa	d									
8	TLRD1	26m 。 Construction of Jinsha Road and ancillary works, urban sub-trunk, Grade I, 1.71km length, 26m width, asphalt, concrete surface	33.56	4.94	NCB	Prior	2010.7	2010.10	14	Tongliang County Jinlong City Construction Investment Co.

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		Notes (Implementation Agency/Retroactive Financing)
9	TLRD2	Reconstruction of Damiao-Hufeng Road and ancillary works Grade III, 9.32km Length, 7.5m Width; market section, urban sub-road, Grade II, 1.93km Length, 7.5m Width, concrete surface	34.19	5.03	NCB	Prior	2010.7	2010.10	14	Tongliang County Jinlong City Construction Investment Co.
10	TLRD3	Reconstruction of Tongyan Road and ancillary works, Grade III, 4.13km Length, road foundation width 8.5m; market section, urban sub road, 1.64km Length	45.52	6.69	NCB	Prior	2010.7	2010.10	12	Tongliang County Jinlong City Construction Investment Co.
11	TLRD4	Reconstruction of TongyanPingtan Road and ancillary works, Grade III, 1.33km Length, road foundation width 8.5m; market section, urban sub-road, Grade II 0.61km Length. Road foundation width 7m, concrete surface; Reconstruction of Yongle bridge-Xinfu Town road ancillary works, Grade IV 4km length, 6.5m width, concrete surface.	19.43	2.86	NCB	post	2010.7	2010.10	12	Tongliang County Jinlong City Construction Investment Co.
		Subtotal	132.70	19.51						
		Land acquisition ,resettlement, design, supervision, project management etc.	35.41	5.21	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	168.11	24.72						
Xiushan Road										
12	XSRD1	Construction of Mie-Ao Road and ancillary works from K0+000 to K2+000, 2km Length, Grade I, design speed 80km/h, road foundation width 24.5m, concrete surface.	30.68	4.51	NCB	Prior	2010.10	2011.1	12	Xiushan Huaxin Assets Management Co. Ltd

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		Notes (Implementation Agency/Retroactive Financing)
13	XSRD2	Construction of Bridge(K2+000~K3+000), crossing Yuhuai line railway, no passage under the bridge, two-slab bridge, 12m Width, asphalt, concrete surface	55.57	8.17	NCB	Prior	2010.10	2011.1	12	Xiushan Huaxin Assets Management Co. Ltd
14	XSRD3	Construction of Mie-Ao road and ancillary works (K3+000~K4+072), including a super large bridge across Meijiang River, total length 1072m, Grade I, design speed 80km/h, road foundation width 24.5m,	16.44	2.42	NCB	post	2010.10	2011.1	12	Xiushan Huaxin Assets Management Co. Ltd
		Subtotal	102.69	15.10						
		Land acquisition ,resettlement, design, supervision, project management etc.	65.57	9.64	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	168.26	24.74						
		Total Investment for Road Subcomponent	698.43	102.71						
2.Water Supply Fengjie Water										
15	FJWS.1	Water supply and distribution network including equipment supply and installation in Zhuyi area, total 68.15km	38.78	5.70	NCB	Prior	2010.3	2010.6	10	Fengjie Hongan Investment Co. Ltd
		Subtotal	38.78	5.70						
		Land acquisition ,resettlement, design, supervision, project management etc.	11.71	1.72	NBF	n/a	n/a	n/a	n/a	as above
			50.49	7.43					1	

1	2	3	4	5	б	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		(Implementation Agency/Retroactive
16	SZWS1	Construction of 1 WTP/6000m3/d, water supply and distribution network (13.38km) in Huangshui Town	17.27	2.54	NCB	Prior	2010.5	2010.8	10	Shizhu County Water Resources and Power Development Company
		Subtotal	17.27	2.54						
		Land acquisition ,resettlement, design, supervision, project management etc.	4.94	0.73	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	22.21	3.27						
Xiushan Water	r Supply					•	•			
17	XSWS1	Construction of 1 WTP/2000m3/d, Water supply &distribution network (23.5km) in Shiye Town	11.23	1.65	NCB	Prior	2010.5	2010.8	11	Xiushan County Water Resources Bureau
18	XSWS2	Construction of 1 WTP/2500m3/d, water supply &distribution network (21.2km) in Rongxi Town	9.47	1.39	NCB	post	2010.5	2010.8	11	Xiushan County Water Resources Bureau
19	XSWS3	Construction of 1 WTP/3000m3/d, water supply &distribution network (33.3km) in Longchi Town	11.49	1.69	NCB	post	2010.5	2010.8	11	Xiushan County Water Resources Bureau
		Subtotal	32.19	4.73						
		Land acquisition ,resettlement, design, supervision, project management etc.	10.53	1.55	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	42.72	6.28						
		Total Investment for Water Supply Subcomponent	115.42	16.97						
2.Wanzhou Ne	w Countryside									
91	WZNC1	Reconstruction of 5 rural roads, 4.79km Length /3.5m-6.5m Width, renovation of pedestrian way(20km Length), construction of a WTP	4.95	0.73	NCB	Prior	2010.6	2010.9	17	PMO under Dazhou Township Government

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		Notes (Implementation Agency/Retroactive Financing)
		serving men and animals(300m3/d), including lighting works								
		Subtotal	4.95	0.73						
		Land acquisition ,resettlement, design, supervision, project management etc.	1.55	0.23	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	6.50	0.96						
3.Chengkou N	ew Countryside									
92	CKNC1	Village roads of 6.2 km in length including new construction of 2.8 km with road bed of 4.5m, reconstruction of 3.4 km with road bed of 6.5m and two bridges	20.95	3.08	NCB	Prior	2010.7	2010.10	14	Chengkou county Dingxing Agriculture Development Co. Ltd
		Subtotal	20.95	3.08						
		Land acquisition ,resettlement, design, supervision, project management etc.	6.62	0.97	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	27.57	4.05						
	Total Investm	ent on New Countryside Component	72.84	10.71						
D. Community	Healthcare Ser	vices System								
1.Yubei Hospit	tal									
93	YBHC1	Air conditioner system Procurement and installation	18.00	2.65	ICB	Prior	2011.12	2012.3	3	Yubei Hospital
94	YBHC2	Civil works and equipment installation of clinic & emergency building, inpatient building (including wastewater treatment system)	120.95	17.79	NCB	Prior	2010.7	2010.10	21	Yubei Hospital
95	YBHC3	Elevator procurement and installation	3.60	0.53	NCB	Prior	2012.4	2012.7	5	Yubei Hospital
96	YBHC4	Procurement of decontamination equipment for operating rooms	4.64	0.68	NCB	Prior	2011.7	2011.10	4	Yubei Hospital

1	2	3	4	5	6	7	8	9	10	11
No.	Contract No.	Contract Description	Base Cost(Y m)	Base Cost (US\$ m)	Procurement /Selection Method	Review by Bank(Prior/post)	Expected Biding Date	Commence Date		Notes (Implementation Agency/Retroactive Financing)
97	YBHC5	Procurement of medical auxiliary equipment	2.60	0.38	NCB	Prior	2011.11	2012.1	5	Yubei Hospital
98	YBHC6	Procurement of medical auxiliary equipment	4.20	0.62	NCB	Prior	2011.9	2011.10	4	Yubei Hospital
99	YBHC7	Medical equipment procurement for community service centers	2.00	0.29	NCB	post	2012.8	2012.11	3	Yubei Hospital
100	YBHC8	Decoration of community service centers	0.75	0.11	NBF	n/a	2012.5	2012.6	4	Yubei Hospital
		Subtotal	156.74	23.05						
		Resettlement, design, supervision, project management etc.	82.98	12.20	NBF	n/a	n/a	n/a	n/a	as above
		Total Investment	239.72	35.25						
E.Institutional	Support and Te	chnical Assistance			•		•			
127	TA1	Project Management and Capacity Building for PMO and PIUs	13.19	1.94	QCBS	Prior	2010.2	2010.5	66	0.34 applying for retroactive
128	TA2	TA Studies	0.34	0.05	IC	post				
	TA-F	*Design Review and Certification *	5.44	0.80	QCBS	Prior	2009.9	2009.12	30	
		Front fee	1.43	0.21						
	<b>Total Inves</b>	stment on CURIP	1,293.08	190.16						

Note:

1USD=6.8RMB

2. Retroactive Fund is about 2 USD million

3.DRC service to be paid under CSCP

# Annex 9: Economic and Financial Analysis China: Chongqing Urban-Rural Integration Project

## **Economic Benefits and Costs Identified**

1. The project will bring various economic benefits to beneficiary populations in and beyond the project areas of Chongqing Municipality, especially to those living in rural areas of Chongqing. These economic benefits and costs of the project were identified and quantified to the extent possible.

2. <u>Economic Benefits.</u> As identified in the summary table below, the main economic benefits of the project include: savings in travel time and cost due to improved road condition in project areas; better public health and quality of life due to improved water supply, sanitation, health care and other public services; increases in amenity and land values associated with improved transportation conditions and environment; productivity increases due to improved skills of migrant workers and better access of rural population to public services (education, medical care, cultural services), energy savings and associated pollution reduction due to improved road conditions; and better quality of the water environment and soils in the project and surrounding areas due to improved water supply and sanitation. In addition, it is expected that the project will bring about long-term and demonstration rural development benefits to Chongqing and other regions in China through its pilots of the new country side development (NCDP) approach and urban-rural integration.

Benefits	Roads and water supply	Township and villages infrastructure	Skills training	Community health care services
Competitiveness, productivity and livelihood increase	++	++	++	+
Health and living standard improvement	++	++		++
Amenities and land/property value increase	++	++		+
Improved access to better public service (education, medical care, cultural service)	++	++		
Energy saving and pollution reduction	++	+		
Quality improvement of water bodies and soil		+		

**Table 1: Identified Benefits of the Project by Components** 

3. <u>Economic Costs.</u> The project's economic costs are mostly capital investment costs (including associated resettlement and environmental mitigation costs as identified by environmental and social safeguard analysis) and operation and maintenance costs (O&M). The details of the economic benefits and costs are provided in the discussion of each component below.

#### General Assumptions, Basic Data and Methods Used

4. The economic analysis assumes that market prices for most elements of costs and benefits do not vary much from their economic value (i.e. estimating separate "shadow prices" is not required). Therefore, in most cases market prices were applied directly in the analysis. There are exceptions, however. For example, a conversion factor is used to price asphalt in calculating costs of road construction. In some components (e.g., road construction), shadow wages are applied using a conversion factor for the costs of migrant workers, which varies depending on different subcomponents. Shadow price of land is also applied using a conversion factor on the basis of the level of compensation and replacement fee set by the government. The economic benefits and costs are valued at base year 2008 price levels. All values are net of inflation, duties, and taxes.

5. The project life (the period of analysis) is set at 20 years of operation, plus the years of construction, unless a different time horizon is specified in the discussion of the component. Construction periods vary depending on the unique nature of the various components or subcomponents of the project. In China, the government normally uses a discount rate of 8% for analysis of projects; this rate is therefore used in the present analysis.

6. Economic costs and benefits of each investment component or subcomponent were quantified as much as possible. For components and subcomponents such as roads and skills training (where economic benefits can be quantified and monetized fairly easily), the cost-benefit analysis approach is used to quantitatively examine the economic viability of the investments. Valuation methods used to quantify and monetize economic benefits include increases in productivity (e.g., the increase of income earning potential as a result of acquiring new labor skills from vocational training), savings in travel time and costs from road improvements, land value increases (hedonic methods) due to infrastructure development and environmental enhancement, and contingent valuation methods to estimate willingness-to-pay for improvements. Sensitivity analysis was also conducted to test the robustness of the results of the cost-benefit analyses.

7. The water supply, sanitation, and township and village infrastructure components have significant health and environmental benefits for residents in the project areas. However, the project analysis was not able to quantify and monetize economic benefits in terms of public health and environment improvement because it is difficult to establish the causal links between a particular investment (usually fairly modest in size), environmental improvement, and public health. Therefore, cost-effectiveness analyses were carried out for these components. A number of different technical options for each specific investment item were evaluated to ensure the selection of the least cost options for achieving the any given development target.

8. Although no contingent valuation survey was conducted specifically in this project to measure the willingness-to-pay (WTP) of individual service recipients for improved water supply, the results of a 2006 WTP survey in a few districts and counties of Chongqing were used as a reference study to show public support and justify the need for the project investment in water supply.

## **Economic Analysis by Component**

#### A. Road development component

9. This component consists of 4 subcomponents of road development in Tongliang County, Yongchuan District, Banan District and Xiushan County, respectively. Cost-benefit analyses (CBA) were conducted for each of them. Detailed description of economic analysis of the Tongliang subcomponent is presented next and the results of the rest are briefly summarized in a table at the end of this section.

#### **Tongliang County road development subcomponent**

10. The objective of this subcomponent is to improve the road accessibility between townships in Tongliang County by building 2 new roads and upgrading 10 existing roads; of these 12 roads, 6 are connecting townships/villages and 6 are town streets. These roads fall into five different grades with a total length of about 31.5 km.

11. *Economic benefits and costs.* Road construction or road upgrading will greatly improve transportation conditions and facilitate the local economic development of rural and less-developed areas in Tongliang County. The main economic benefits of road condition improvement are savings in transport time and transport costs, productivity increases, increases in the value of the land and properties close to the road, reduction of air emissions, and improvements of other living conditions due to the improved accessibility of rural residents to better public services (e.g. medical care and education) in nearby towns.

12. A cost-benefit analysis of the Tongliang road subcomponent was conducted. The project duration includes a 3 year construction period and 20 years of operation. In the costbenefit analysis, such benefits as time and transport costs saved, and agricultural productivity increase due to improved transport conditions are included and calculated. Based on both available statistics and research results, road conditions improvements will bring in more demand for local agricultural and tourism services and increase the net income of local farmers. In this analysis it is assumed that the increase will be 5%.

13. Other benefits such as an increase in the value of the land close to the road, reduced traffic jams, enhanced accessibility to public services, and reductions in air pollution are not included in the CBA either because they are difficult to quantify or they are very small. So

the estimated economic return of the investment is on the conservative side (e.g. costs are fully accounted for, only certain benefits are included). Even with the restricted accounting of benefits, it is estimated that the present value of the total economic benefit of this subcomponent amounts to RMB314.9 million.

14. The costs of this subcomponent consist of capital investment costs and O&M costs. It is estimated that total capital cost of this component amounts to RMB141.13 million in present value, 20% of which remains as a residual value and is deducted from the cost at the last year (2031). The O&M costs in an ordinary year, e.g., 2015, are RMB1.05 million. But based on technical guidelines a medium-degree road surface repair would be needed every five years and a major repair needed every ten years during the 20 year operation period. O&M cost in a year of medium repair would be 1.5 times the amount need in a regular year and the O&M cost of year 2016 (when a medium repair is needed) is RMB 2.84 million, and that in 2021 (when a major repair is needed) is RMB5.00 million. When investment costs (less residual value of 28.23 million RMB in the year 2031) and O&M costs are added together the total cost in present value terms of the Tongliang road component is estimated at RMB 132.93 million. This amount is considerably less that the estimate of the present value of benefits.

15. *Results of the cost-benefit analysis.* The aggregated results of the analysis are summarized in the table below. It shows that the economic internal rate of return (EIRR) of the road investment is 18.2%, its net present value (NPV) is RMB182 million (USD26.76 million) and benefit-cost ratio (BCR) is 2.37.

Benefit/Cost (Million RMB)	Net Present Value (at 8%)	2009	2010	2011	2012	2013	2014	2015	2020	2025	2030	2031
Benefits												
- Transport costs saved	60.82	0	0	0	5.23	5.66	6.13	6.61	8.47	10.14	10.14	10.14
- Travel time saved	145.19	0	0	0	6.07	7.10	8.30	9.66	18.18	31.99	47.01	50.77
- Increased agricultural productivity	108.92	0	0	0	9.56	10.03	10.54	11.06	14.12	18.02	23.00	24.15
Total benefit	314.93	0	0	0	20.85	22.79	24.97	27.34	40.76	60.15	80.15	85.06
Costs												
- Capital investment	116.37	35.28	70.56	35.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-28.23
- O&M	16.56	0	0	0	0.83	0.90	0.97	1.05	1.54	2.27	3.33	10.80
Total cost	132.93	35.28	70.56	35.28	0.83	0.90	0.97	1.05	1.54	2.27	3.33	-17.42
Net economic flows	182.00	-35.28	-70.56	-35.28	20.02	21.89	24.00	26.29	39.22	57.89	76.81	102.48
EIRR	18.23%											
B/C ratio	2.37											

Table. Cost-benefit analysis of Tongliang Road

16. Sensitivity analysis was carried out assuming a 10% increase in total cost and a 10% decrease in total benefits. Under these assumptions the investment will still provide an EIRR of 15.5% and NPV of RMB136.7 million with a BCR of 1.9. Therefore, the investment in this subcomponent of rural road development in Tongliang County is economically feasible and the results are quite robust.

#### Summary of economic analyses of other road subcomponents

17. Cost-benefit analysis was employed for the other three road subcomponents in Banan District, Yongchuan County and Xiushan County. As shown in the table below, the results of the analyses indicate that all of the three subcomponents are economically feasible. Sensitive analyses further shows that the three proposed investments have good returns even in the assumed cases of a 10% increase in total costs and a 10% reduction in total benefits.

Subcomponents	Total	NPV	EIRR	BCR	Sensitive Analysis		
	Investment (million RMB)	(million RMB)			EIRR when benefit decreased by 10%	EIRR when cost increased by 10%	Combined case
Road development in Banan	226.1	97.8	11.7%	1.5	10.7%	10.8%	9.8%
Road development in Yongchuan	98.4	106.4	15.9%	2.0	14.5%	14.6%	13.3%
Road development in Xiushan	270.3	375.4	17.8%	3.1	16.5%	17.8%	

#### **B.** Water Supply Component

18. The water supply component consists of 3 separate water supply investment subcomponents in Xiushan, Fengjie and Shizhu, respectively. As described above, cost-effectiveness analyses were conducted for these water supply subcomponents. A detailed description of the water supply improvement subcomponent in Xiushan County is presented below as an example.

#### Water supply in Xiushan County

19. *Public support.* Although no contingent valuation survey was conducted specifically in this project to measure the willingness-to-pay (WTP) of service recipients for improved public services, the results of a 2006 WTP survey for water supply in a few districts and counties of Chongqing were used as a reference point to show public support for improved water supply. In general, residents of Chongqing Municipality as a whole are very supportive of improving water services. The 2006 survey found that the percentage of residents who were satisfied with the quality of water supply service was quite low, from 67% in Dianjiang to only 31% in Yongchuan. Residents living in suburban areas and small towns tend to have a lower satisfaction rate than those living in urban centers due to poor water quality and reliability of service. The survey also found that local residents had a higher WTP value,

although not by much, than the existing water tariff and sewerage charges then being charged. As for the residents of the project areas in Xiushan County, they are very supportive of water supply infrastructure development as reliable and safe water is currently not ensured and citizens are suffering from poor quality of water polluted by the mining industry.

20. The purpose of this subcomponent is to meet water demands by building water supply facilities in 3 rural townships in Xiushan Tujia Minority Autonomous County, where most of the population comes from 17 minority ethnic groups. Currently, in a "no project" scenario, about one-third of the population in each of the three townships is relying on water from wells of their own or creeks from mountains. Not only is the quantity of water not guaranteed, but the quality of water is below state standards for drinkable water because of pollution. The completion of the water supply subcomponents, including water purification supply and pipelines for water distribution and transmission, would contribute to improvements in living quality of local residents and conditions of socioeconomic development of the three townships. Based on the projected water demands of the three townships, the proposed three water supply plants are projected to have water supply capacity of 2,000 m<sup>3</sup>/day, 2,500 m<sup>3</sup>/day, and 3,000 m<sup>3</sup>/day by 2020. Of a total estimated investment of RMB43.76 million (USD6.44 million) World Bank loan amount of US\$3.75 million is proposed.

21. *Economic costs and benefits.* The main economic benefits from the improvement in water supply under this subcomponent are improvements in health and quality of living of the local population, increased productivity, and reduced pressure on the local aqua-system (including underground water sources in the project areas). According to projections, the population who would benefit from this investment total more than 58,100 people (15,000 in Shiye Township, 18,100 in Rongxi Township, and 25,000 in Longchi Township) by 2020. Improved water supply would also bring productivity increases to industries in the project areas.

22. The costs of the subcomponent consist of capital investment cost, O&M cost, and the cost of environmental management during construction. As most of the benefits are difficult to quantify and monetize, cost-effectiveness analysis was conducted to identify the least-cost options.

23. *Alternatives*. For water supply facilities in the three townships, different alternatives in terms of the location of water plants and water purification processes were identified and compared against technical and economic criteria. For example, two alternative water supply facilities in Shiye Township were identified. In Alternative I, the water plant is to be built in Dengyanggou with Zhongling Reservoir as the water source. In Alternative II, the water plant was to be built in Yaojiatong with Meijiang River running across Shiye Township as the water source. Cost-effectiveness analyses were conducted for the two alternatives.

24. *Results of the Cost-Effectiveness Analyses.* The economic analysis for a project planning period of 20 years including 2 years of construction period shows that total cost of Alternative I is RMB21.55 million with a capital investment of RMB 13.26 million. With a total output of water supply of 17.74 million tons, the unit cost of water supply is RMB 1.21/m<sup>3</sup>. In Alternative II, the total cost is RMB19.64 million with a capital investment of RMB14.44 million. With a total output of water supply of 10.51 million tons, the unit cost of water supply is RMB18.7/m<sup>3</sup> (See the Table below). Although Alternative 1 costs a bit more that Alternative 2 overall, it produced much more water at lower cost per ton of water produced. Therefore, Alternative I is more cost-effective and thus recommended.

sold encent ences multiples of the 1 to mice multiple in single 10 mising				
	Alternative I	Alternative II		
Total cost (million RMB)	21.55	19.64		
Capital investment (million RMB)	13.26	14.44		
Output (million tons)	17.74	10.51		
Unit cost (yuan RMB/m <sup>3</sup> )	1.21	1.87		

Cost-effectiveness Analyses of the Two Alternatives in Shiye Township

25. The Affordability of the low income group. According to the financial analysis, to have an acceptable financial internal rate of return of above 6%, a water tariff for domestic use would need to be set at RMB1.9/ $m^3$ , which would be a 33% increase over the current tariff level of RMB1.5/ $m^3$  in the three townships. Since Xiushan County is a less developed county and the income level of local residents is low, this level of increased water tariff would not be affordable to many lower income households. Therefore, it is suggested that local governments should take proper policy measures (such as direct subsidy or fee waiver) to mitigate the negative income impact on low income population.

#### Results of other water supply subcomponents

26. Similar analytical approaches were adopted for the economic analysis of the other two water supply investments in Fengjie County and Shizhu County. Alternative options were identified and the cost-effective analysis was conducted to ensure that least-cost options selected. The results of the cost-effective analysis provide support for the proposed options (but also point out the need for some government financial support to help off-set the increased water tariffs required to pay for the expanded water supply).

#### C. Township and Village Infrastructure Improvement Component

27. This component is composed of 3 subcomponents of infrastructure development in townships and villages in three counties/districts selected as a pilot of the NCDP. Infrastructure to be financed includes roads, pedestrian walk ways, water supply facilities, wastewater drainage system, and community centers. As most of the benefits of the infrastructure improvements are difficult to quantify and monetize, cost-effectiveness analysis was conducted whereby alternatives are identified and compared, to the extent

possible, to ensure that the least-cost options to provide selected benefits were chosen. A detailed description on the economic analysis of the NCDP in Wutu Village, Dazhou Township, Wanzhou District is presented below as an example.

### Infrastructure improvements in Wanzhou District

28. The objective of this subcomponent is to improve the living quality of villagers of Wutu Village by upgrading a total length of 4.79 km village roads, improving a total length of 20 km of pedestrians sidewalks, building a water supply facility with a capacity of  $300 \text{ m}^3$  /day, and construction of a total length of 1.36 km rain and wastewater drainage ditches.

29. *Economic costs and benefits.* The main economic benefits of this subcomponent include: savings in travel time and transport costs, productivity increases, land value increases due to improved transport and sanitary conditions, improvements of health and environmental quality of the local population due to water supply improvements, and protection of the local aqua-system due to the construction of a sanitation and a rain water drainage system. The total population who would benefit directly from the road and pedestrian improvement amounts to 4,200 people, and those benefiting from water supply improvement amount to 1,500 people. Compared with the "no project" scenario, the subcomponent would have considerable benefits although most of them are difficult to quantify in monetary terms.

30. The costs of the subcomponent consist of capital cost and O&M cost. The total estimated capital investment in this subcomponent will amount to RMB6.50 million, of which RMB6.24 million will be for civil works. A World Bank loan amount of RMB3.30 million (about US\$0.49 million) is proposed with RMB3.20 million of counterpart funds to be provided by Dazhou Township. As most of the economic benefits are difficult to quantify and monetize, cost-effectiveness analyses were conducted to select the least-cost options.

31. *Project alternatives*. Several technical alternatives were identified for most project elements: materials of road pavement, design of pedestrians' sidewalks, and sources and location of water supply facilities (see Table below). Alternative options were analysed and compared against technical and economic criteria to ensure the selection of the most technically feasible and least cost options.

Elements	Alternatives	Technical Criteria	Economic Criteria	Proposed Alternatives
Materials for	Alt. 1: Cement	More stable, stronger,	Construction cost:	
road	pavement	longer life	RMB 3/m2, higher cost	
pavement			of maintenance	
	Alt. 2: Bituminous	Better water	Construction cost:	
	pavement	permeability, more	RMB 10/m2, lower	
		plastic	cost of maintenance	
Pedestrian	Alt. 1: Precast	Stronger, easy to operate	Higher cost	

Comparison between alternatives for new countryside development in Wanzhou District

pavement	concrete form			
	Alt. 2: Cast-in-	Simple process, easy to	Lower cost	
	place reinforced concrete plate	maintain and repair		
Source of	Alt.1: Yangtze	Water quantity and	High costs of	
water supply	River, 1,700m east	quality ensured, but	construction and	
water suppry	to water supply	270m height over water	operation	
	facility	supply facility	operation	
	Alt. 2: Fenyong	Good water quality, but	High costs of	
	Reservoir, 8,000	long distance for water	construction and	
	meters west to	transmission	maintenance	
	water supply			
	facility			
	Alt. 3:Ground	Water quantity and	lower costs of	$\checkmark$
	water from	quality ensured, short	construction and O&M	
	Dayantang, 300	distance for water		
	meters from water supply facility	transmission		
Location of	Alt.1: Close to site	Enabling centralized	Higher cost for water	
water supply	of water	management of water	transmission	
facility	withdrawal	supply and water	u unonnoon	
includy	Withai a Wai	withdrawal facilities;		
		convenient for		
		wastewater discharge		
	Alt. 2: Close to the	No need for pipes with	Lower cost for water	$\checkmark$
	water distribution	high pressure for water	transmission	
	area	transmission		

32. *Results of the Cost-Effectiveness Analysis.* As shown in the above table, alternative elements of the subcomponent were identified and the cost of each alternative was estimated. Least-cost options were selected on the basis of their relative costs. While the outputs/outcomes of the different options are similar and benefits are difficult to quantify.

33. *Public support for the subcomponent*. A survey was conducted to test public support by local villagers for the proposed road upgrading and water supply facility development. Questionnaires were answered by 30 villagers selected by random sampling. Results of the survey show that local villagers are very supportive of the objectives of the project. All respondents think the subcomponent is necessary and agree on its implementation. 4 respondents were willing to accept the impacts of the subcomponent in terms of noise and dust pollution during construction period while the other 26 would accept them when proper mitigating measures are taken.

34. The other two infrastructure development subcomponents in Chengkou County and Qijiang County will invest in similar project activities and have similar objectives of improving public services for rural residents. Proposed investments in Chengkou total RMB28.62 million and in Qijiang, RMB37.44 million. A similar approach was adopted for the economic analysis. Each subcomponent provided various economic benefits, many of which were difficult to quantify and monetize; alternative options were analyzed and the least cost one was chosen.

### **D.** Skills Training For Migrant Workers

35. This component consists of 4 subcomponents dealing with expanding and upgrading training institutions --the Chongqing Technology & Business University, Yubei Vocational Center, Wushan Vocational Center, and Shizhu Vocational Center -- to improve their capacity for training migrant workers (i.e., farmers from rural Chongqing) for employment in the non-agricultural sector. This component will enhance the skills of migrant workers and create more employment opportunities, which would increase the productivity and income potential of the farmers trained. Cost-benefit analysis was applied to each of the four subcomponents. The results for the Wushan Vocational Center subcomponent are presented below as an example while results of the other three subcomponents are summarized.

### Skills training for migrant workers in Wushan County

36. The objective of this subcomponent is to strengthen the capacity of the Wushan Vocational Center to train migrant workers through purchasing necessary training equipments developing curriculum and courseware, training trainers and farmers, improving training planning and management, and providing employment support services. The project is designed to train 12,000 farmers each year (4,000 for 3-6 months and 8,000 for 1-3 months) at the Wushan Vocational Center, with 90% of those trained successfully obtaining employment.

37. *Economic benefits.* The ultimate economic benefit of the component is the improvement in living standards through increasing productivity and income of those farmers trained and employed. The benefit is estimated by examining increases in total income of migrant workers trained compared to those not trained.<sup>4</sup> Moreover, trained migrant workers may share their skills and knowledge as well as their income in their home villages, thereby generating spillover effects into rural Chongqing. The analysis did not try to value the spillover effects. Since the project analysis only included the additional income of the trained migrant workers compared to what their income would have been in the "no project" scenario, the estimation of project benefits represents a conservative, "low-end" estimate.

38. Based on the results of a survey conducted by the Wushan government employment agency and Wushan Vocational Center of workers trained at the center, the average income of a skilled worker is much higher than that of a worker without training. While the income varies depending on specific skills, the differences ranged between RMB 800 to RMB 3,000 per year (see the Table below). In the analysis, median estimates of the values of increased income of migrant workers after training were used to estimate the total benefits. For example, it was estimated that migrant workers would have an increase in annual income of

<sup>&</sup>lt;sup>4</sup> As there is a shortage of skilled workers in China's labor market, it is assumed that migrant workers trained by the project would obtain jobs and that their employment would not hurt the employment opportunities of other workers. Therefore, their employment would result in a net increase in national productivity.

RMB2,000 after receiving training in electric apparatus repairing, and of RMB1,000 per year after receiving training in sewing and tailoring. Although the increases in income should occur year after year, only one year's income increase is considered in the analysis. This represents a very conservative estimate of the economic benefit from the project.

	Income of Migrant Workers (RMB yuan)				
Professional Skills	Annual Income	Income increase compared with laborers without skills			
Electric apparatus repairing	5,000~7,000	1000~3000			
Auto body repairing	5,000~7,000	1000~3000			
Electronic/electrical engineering	5,000~6,600	1000~2600			
Mechanic engineering	5,000~6,600	1000~2600			
Dress tailoring and sewing	4,800~5,200	800~1200			
Building construction	5,000~6,000	1000~2000			
Computer application	5,000~6,000	1000~2000			

Table. Annual Income of Migrant Workers by Category in Wushan County

39. *Economic costs.* The project costs consist of capital investment costs, including cost of purchasing and installing equipment, construction, employment support services, and O&M costs, including total annual salary of teachers, utility cost, and other administrative costs. The opportunity cost of income lost by migrant workers during training (assuming an average of three months training for each person at RMB330 per month) is also taken into account. The total estimated capital investment in this subcomponent for the first five years of construction period will amount to RMB23.04 million in present value. The total of O&M and opportunity cost is RMB124.38 million.

40. *Results of the Cost-Benefit Analysis.* A cost-benefit analysis of the capacity building subcomponent for Wushan Vocational Center was conducted. The project time horizon includes a one year of construction period, four years of partial operation as construction continued, and 15 years of full operation (2014-2029). It is assumed that the number of farmers to be trained annually during the partial pilot operation period will gradually increase from 5,000 in 2010 to 10,000 in 2013, and that the number during the full operation period will be 12,000 each year. The income increase of a trained migrant worker is constant over the project period of 20 years, as are the O&M and opportunity costs over the 15 years of full operation period. It is estimated that the present value of the total economic benefit of the investment would amount to RMB165.59 million and that the total cost is RMB147.42 million.

41. The results of the analysis are presented in the Table below. It shows that the economic internal rate of return (EIRR) of the investment is 17.56%, its net present value (NPV) is RMB 18.16 million (US\$2.67 million) and benefit-cost ratio (BCR) is 1.12. It is worth mentioning that the result is very conservative due to the rigid assumption and omission of other economic benefits in the analysis.

Benefit/Cost (Million RMB)	Present Value (at 8%)	2009	2010	2011	2012	2013	2014	2015	2020	2025	2028
Economic											
Benefit											
Income increase of trained farmer migrant workers	165.59	0	9.03	10.84	14.46	18.07	21.68	21.68	21.68	21.68	21.68
Total benefit	165.59	0	9.034583	10.8415	14.46	18.07	21.68	21.68	21.68	21.68	21.68
Cost											
Capital investment	23.04	12.47	6.57	3.85	1.99	1.99	0.00	0.00	0.00	0.00	0.00
O&M & Opportunity cost	124.38	0	6.79	8.14	10.86	13.57	16.29	16.29	16.29	16.29	16.29
Total cost	147.42	12.47	13.35	11.99	12.84	15.56	16.29	16.29	16.29	16.29	16.29
Net economic flows	18.16	-12.47	-4.32	-1.15	1.61	2.51	5.40	5.40	5.40	5.40	5.40
EIRR B/C ratio	17.56% 1.12										

### **Results of other skills training subcomponents**

42. Similar cost-benefit analyses were conducted for the other 3 subcomponents in Yubei District, Shizhu County, and Chongqing Business University. As shown in a summary table below, results of the analyses indicate that the subcomponents of Yubei District, Shizhu County, and Chongqing Technology and Business University are all economically feasible.

Subcomponents	Present Value of Total Capital Investment (million RMB)	NPV (million RMB)	EIRR	BCR
Skills training in Yubei	41.20	53.92	17.13%	1.26
Skills training in Shizhu	19.55	12.08	15.86%	1.13
Skills training in Chongqing Technology and Business Univ.	28.56	11.83	13.69%	1.30

### E. Improving Community Health Care Service

43. This component is designed to provide improved medical services in rural areas through community health centers or stations (CHC/CHS) and village health clinics by provision of medical equipment and guidance, training of medical staff, and expansion and development of new health care facilities. Its general purpose is to improve access and enhance quality of health care services in both peri-urban and rural areas of Chongqing. The component will be implemented separately by Chongqing Health Bureau (CHB) and Yubei District Central Hospital. It consists of two subcomponents.

### The Chongqing Health Bureau (CHB) subcomponent

44. The CHC subcomponent carried out by CHB, would cover the following kinds of activities: (a) equipping about 687rural CHCs and 37 urban CHCs; (b) building capacity for training doctors/nurses to serve in rural areas and urban communities; and (c) conducting policy research for improving public health in Chongqing.

45. Economic benefits include avoided welfare or life loss due to immediate medical care, savings on time and medical expenses and increased productivity due to improved health care (and a healthier population). While it is in theory possible to quantify these benefits and conduct a cost-benefit analysis, the data requirements to do this are large and it was not possible to make these estimates. Therefore, only the following small case study of a rural health clinic in Dawu Administrative Village was carried out to illustrate the economic feasibility of this investment.

46. Dawu Administrative Village consists of 19 natural villages or house clusters scattered in an area of 5.06 square kilometers. It has 1,070 households and a total population of 3,200. Its main health clinic, located in the geographic center of Dawu Village and operated by a young village doctor, provides basic medical examination and pharmacy services to about half of the population (the rest using other clinics nearby or the township hospital 3 km away from the clinic). The clinic needs to expand the floor area from 25 to 60 square meters and upgrade its facility in order to meet CHB standards. The total capital cost is RMB20,000 yuan, of which RMB10,000 is for new medical equipment and furniture, RMB5,000 for a computer and a printer, and RMB5,000 for interior design and decoration of the clinics. In addition, the doctor needs to pay RMB1,800 more each year for the rent of the additional office space.

47. According to the village doctor, the clinic averages 10 visits daily, some for examination or treatment of common diseases like flu and some for routine treatment of chronic diseases, but most clinic visitors come to get simple medicines. The doctor charges RMB2 per visit plus the cost of other medical services and medicine. The gross revenue of the clinic is RMB4,000 per month (an average of about RMB13 per visit) or RMB48,000

each year. Because of the poor condition of the clinic, there are local residents who do not use the clinic service. Some go to a township hospital located 3-5 km away while some see no doctor at all.

48. Improving the capacity of the village clinic will help it receive more patients with common diseases and reduce the costs associated with the time and cost for traveling to other hospitals and other medical costs. It is estimated that the increase in the number of visits will be 10-30 percent after the project is implemented. If we use a low end 10% increase, assume the project duration is only 10 years and use the financial revenue as the proxy for economic benefits, the economic rate of return will be about 14%. Considering that the actual economic benefit of the clinic improvement to local people should be much higher than the actual expense of patients, the EIRR would be much higher than 14%. Therefore, the investment in rural health clinics is well justified economically.

### The Yubei District Central Hospital subcomponent

49. This subcomponent includes relocation, expansion and equipping of Yubei District Central Hospital and establishment of 10 CHSs in new development areas in Yubei District. The objective of the subcomponent is to improve access for local residents of Yubei District and neighboring areas to more convenient and better public health service.

50. Like the <u>Chongqing Health Bureau subcomponent</u>, the economic benefits of this subcomponent include avoided welfare or life loss of local residents due to provision of more convenient medical care, savings on time and medical expenses and increased productivity due to improved health care. While it is hard to quantify and monetize all the economic benefits, a cost-benefit analysis for the project period of 20 years was conducted to provide a conservative estimate of the economic return of the investment.

51. *Beneficiary population.* According to the 2008 data, the share of Yubei District Central Hospital in the total number of outpatients in all medical care institutions of the District was 27%, and that for in-hospital patients was 44%. If a medium proportion of 36% is taken, an estimated 345,000 residents would benefit from this investment given the total population of 958,000 in Yubei District. Although it is projected that the population in Yubei District will grow very fast and could reach to 2.7 million in 2020, the analysis simply assumes the beneficiary population will be constant from 2008. It will clearly present a low end estimate of the economic benefit.

52. *Value of economic benefits.* In the analysis, the projected financial revenue of the Yubei District Hospital is used as a proxy for the direct economic benefit to the people who visit and use hospital facilities. Based on the data of 2006, 2007 and 2008, it is estimated that the annual average financial revenue of the hospital would amount to RMB165.0 million. Because the economic benefit to a patient is normally higher than the medical expenses

incurred, the financial revenue again represents a low end estimate of the economic benefits to patients. For the rest of the beneficiary population who do not visit the hospital, the economic benefit is estimated based on the WTP value of local residents for the improvement of health care service. According to a survey, the average WTP value of local residents is RMB124 yuan per person per year. Thus, the economic benefit to this portion of beneficiary population would amount to RMB13.6 million. Again, this is a conservative number given the assumption that the total beneficiary population will be constant over the next 20 years.

53. *Economic costs*. Economic costs of this subcomponent consist of capital investment costs (including construction costs and medical equipment costs) and O&M costs. The total financial cost of the subcomponent is estimated at RMB242 million. Excluding taxes, fees, interests of the construction period, etc, the capital investment in economic terms is RMB169.5 million. O&M cost will amount to RMB931.8 million. Annual economic benefits and O&M costs for the first two years of operation are assumed at 60% and 80% of the level of full operation.

54. *Results of the Cost-Benefit Analysis.* The cost-benefit analysis shows that the present value of the total economic benefit of the investment would amount to RMB1,216 million and the total cost amount to RMB1,101 million, with a net present value (NPV) of RMB115.1 million (US\$16.9 million). The EIRR of the investment is 15.24% and its benefit-cost ratio (BCR) is 1.10. The result is conservative due to the conservative assumptions made for the beneficiary population and economic benefits in the analysis.

### **Scope of Financial Analysis**

55. According to the financing arrangements of the proposed Project, in addition to the Bank loan, the construction of the proposed Project will be financed by local government equity, internal cash of the project implementing agencies, and loans from local banks. During operation of the proposed Project's assets, O&M will be supported by either user charges or government budgetary funds. Therefore, the financial analyses of the proposed Project will be carried out at three levels: municipal level, project level, and entity level.

#### A. Financial Analysis at Municipal Level

56. The objective of financial analysis at municipal level is to assess the financial capacity of local governments to provide equity to the subcomponents of the proposed Project and pay the debt services of the proposed Project. The governments of Xiushan County, Yongchuan District, Wushan County, Shizhu County, Qijiang County, Chengkou County, and Yubei District will provide equity to the subcomponets of the proposed Project to be implemented in their jurisdictions. These equity contributions will come from their fiscal revenues (that include general budgetary revenues and transfer payments). Provided below is an example of Xiushan County to show the process of assessment of the financial

capacity of Xiushan County Government to provide project equity to the subcomponents to be implemented in their county. Then, the results of other assessments are summarized later in this annex.

### Xiushan County Government

57. In Xiushan County, two subcomponents will be implemented: (a) Xiushan Mie'ao to Liangti Road and (b) Xiushan Water Supply. The total investment of these two subcomponents is about RMB219.4 million. Financing from the Bank loans is RMB104.2 million and the government's equity contribution is RMB75.0 million.

58. Xiushan Finance Bureau provided their historical fiscal revenues and expenditures over the past 6 years and made projections for the next 3 years. The fiscal revenues of Xiushan County Government increased from RMB325.88 million in 2003 to RMB1,382.37 million in 2008, an average annual growth rate of 34%. Due to the influence of the current worldwide economic crisis, Xiushan Finance Bureau projected the growth rate for 2009 at 20%, and 25% for 2010 and 2011. For the propose of further projection, 10% was used to project the fiscal revenues from 2011 onwards. The fiscal expenditures of Xiushan County Government in 2003 was RMB325.25 million and in 2008 was RMB1,379.37 million. The average percent of fiscal expenditure to revenue is 99.77% from 2003 to 2008. This percentage was used to project the fiscal expenditures from 2009 to 2029.

59. The Bank loan for these two subcomponents is assumed to be withdrawn equally over a 5 year period and repaid over 15 years, in equal payments, following implementation of the Project. The government equity contribution to these two subcomponents will be paid equally over 5 years.

60. To summarize, the analysis of each local government shows that the requirements of equity contributions and debt service only account for less than 1% of the fiscal revenue each year. It implies that the local governments will have sufficient resources to support the proposed Project during implementation and can cover payments of debt services.

### B. Financial Analysis at Project Level

61. Since the proposed Project will produce public benefits such as road, water supply, sanitation, education, and health, the objective of the financial analysis at the project level is to ascertain the financial viability and sustainability of the proposed Project.

62. The financial analysis at project level will not cover the following components or subcomponents because these types of components do not generate financial incomes and their O&M will fully rely on local government budgetary funds.

- Subcomponent of roads. Roads constructed under the proposed Project are not toll roads. On completion of the proposed Project, the roads will be transferred to local Municipal Facilities Administrative Bureaus for operation and maintenance. The Municipal Facilities Administrative Bureaus are fully funded by government budgets.
- Component of new countryside development. This component will build in rural area roads and water supply facilities and wastewater drainage system, solid waste collection and transfer, new energy facilities, and facilities for delivering public service. On completion of the Project, these assets will be transferred to townships or villagers' committees. Operation and maintenance of the assets rely on government budgetary supports. There is no financial revenue generated by these assets.
- Subcomponent of strengthening CHSs. This subcomponent will be implemented by Chongqing Municipal Health Bureau. CHSs built by this subcomponent are in rural areas. On completion the CHSs will be transferred to local health bureaus. Their O&M expenses will be covered by local government budgetary support.

63. The component regarding vocational education centers will provide training for migrant workers. Although the local government will support the construction of vocational education centers in their jurisdictions, the vocational education centers have to pay the debt service incurred under the Project. Training offered is free to migrant workers, and local governments will subsidize the vocational education centers. Therefore, the financial analysis at the project level for this component is simply to check the adequacy of government subsidies to meet debt service requirements of the vocational education centers. Results of the analysis for Wushan Vocational Education Center subcomponent are presented below as an example of how the financial analysis was prepared, while the results of the other 3 subcomponents are summarized later in this annex.

### Migrant Workers' Training in Wushan Vocational Education Center

64. The total investment of Wushan Vocational Education Center under the proposed Project is RMB28.619 million. It will be jointly financed by the Bank loan (RMB13.722 million), government equity (RMB13.5 million), and the internal cash flow of Wushan Vocational Education Center (RMB1.397 million).

65. *Operating income*. On completion of this subcomponent, Wushan Vocational Education Center will train about 12,000 person-times per year, including 4,000 person-times (or 20,000 person-months) over medium term periods (3~6 months) and 8,000 person-times (or 23,000 person-months) over short term periods (1~3 months). The training target in 2020 is 20,000 person-times per year. When Wushan Vocational Education Center successfully delivers the training courses, the local government will provide subsidies. The subsidy standards are: RMB1,100 per person-time for medium term training and RMB300 per person-time for short term training. The following table shows the training income generated for training migrant workers:

		Total	From 2011 to 2019 Each Year	From 2020 to 2029 Each Year	
Ca	apacity for Training		60%	100%	
N	umber of workers Trained (person-times)	308,000	12,000	20,000	
	Medium Term	102,667	4,000	6,667	
	Short Term	205,333	8,000	13,333	
T	raining Income (RMB)	174,533,333	6,800,000	11,333,333	
	Medium Term	112,933,333	4,400,000	7,333,333	
	Short Term	61,600,000	2,400,000	4,000,000	

#### Training Income from Migrant Workers' Training

66. *Training expenses*. The operating expenses for training migrant workers include salary and welfare benefits for teachers, office expenses, student expenses, administrative expenses, and others charges. The following table presents the main training expenses for migrant workers' training.

	Total	2011	2020
Training expense (RMB)	97,677,828	3,805,630	6,342,716
Salary and Welfare	35,814,240	1,395,360	2,325,600
Office Expense	14,325,696	558,144	930,240
Student Expense	25,761,120	1,003,680	1,672,800
Administrative Expense	14,041,695	547,079	911,798
Others	7,735,077	301,367	502,278

Training Expenses for Migrant Workers' Training

- Salary and Welfare Benefits. Before 2020, there are expected to be 72 teachers providing training for migrant workers. After 2020, there will be 120 teachers. The base salary and welfare benefits per year for one teacher in 2009 is RMB19,000. This will be increased by 2% per annum (p.a.) for inflation, pay-rise, etc.
- Office expenses. It is estimated to be 40% of salary and welfare costs based on past experience.
- Student expenses. This is about RMB82 per student. It will also be increased by 2% p.a. for inflation and other contingencies.
- Administrative expenses. Based on past experience, it is 18.5% of the sum of salary and welfare costs, office expenses, and student expenses.
- Others. It is about 8.6% of other training expenses.

67. *Debt service*. The debt service requirement is related to the Bank loan. The maturity is assumed to be 20 years, including 5-year grace period. The interest rate is 6% p.a. and the one-time front-end fee is 0.25%.

68. *Surplus of cash flow*. The table below shows that the cash flow of migrant workers' training in Wushan Vocational Education Center has a surplus of about RMB53 million.

Summary of Cash Flow of Migrant workers Training							
	Total	2010	2011	2020			
Training Income (RMB)	174,533,333		6,800,000	11,333,333			
Training Expense (RMB)	97,677,828		3,805,630	6,342,716			
Debt Service	23,636,145	445,965	823,320	1,436,236			
Surplus	53,219,360	-445,965	2,171,050	3,554,381			

#### Wushan Vocational Education Center Summary of Cash Flow of Migrant Workers' Training

### **Results of Migrant Workers' Training in other Vocational Education Center**

69. Similar analyses were conducted for other migrant workers' training in Yubei District Vocational Education Center, Shizhu County Vocational Education Center, and Chongqing Technology and Business University. The results of these analyses, summarized in the following table, show that the incomes of the migrant workers' training programs in Yubei District Vocational Education Center and Shizhu County Vocational Education Center would cover their expenses and debt service costs. However, Chongqing Technology and Business University will have to increase its target training levels from 4,000 person-times per year to at least 5,140 person-times per year during the projection period, so that their training income could cover their training expenses and debt service costs.

Migrant Workers' Training in	Yubei District Vocational Education Center	Shizhu County Vocational Education Center	Chongqing Technology and Business University
Training Incomes	102,872,542	76,600,000	35,720,000
Training Expenses	68,416,832	46,622,026	16,006,288
Debt Service	18,086,250	17,225,000	27,560,000
Surplus	16,369,460	12,752,974	-7,846,288

Summary of Cash Flows of Migrant Workers' Trainings in other Vocational Education Centers

### Water Supply Component Financial Analysis

70. The financial analyses of the water supply subcomponents were conducted at the project level. These subcomponents will build water supply plants and distribution networks in the counties of Fengjie, Shizhu, and Xiushan. The objective of financial analysis is to ascertain the financial viability of the subcomponents Xiushan Water Supply is taken as a example to demonstrate the process of financial analysis and the results of other two water supplies will be presented later in this annex.

71. There are 3 water supply facilities to be built under the propose Project in 3 rural townships in Xiushan Tujia Minority Autonomous County. The total capacity of the 3 water supply facilities is 7,500 m<sup>3</sup> per day. After the completion of construction, the O&M costs of these water supply facilities will mainly rely on water tariffs. Financial analysis of these water supply facilities was carried out based on the following assumptions:

Water Tariffs. The current water tariff in these 3 townships is RMB1.50 per m<sup>3</sup>. The local government has recently approved a new water tariff for 4 other townships in Xiushan County that is RMB1.9 per m<sup>3</sup>. Therefore, the following water tariff were used to make projections of revenues for the water supply facilities under the proposed Project:

For households	RMB1.90/m <sup>3</sup>	30% of total consumption
For industry and commerce	RMB3.50/m <sup>3</sup>	35% of total consumption
For other uses	RMB2.80/m <sup>3</sup>	30% of total consumption

Water Supply. The capacity of these 3 water supply facilities is about 7,500  $\text{m}^3$  per day. During the first 4 years of operation, only 80%, 85%, 90%, and 95% of the capacity will be respectively used. Self-consumption of water by local government is 5%. The leakage rate is estimated at 10%. Taking into account these assumptions, for the first 5 years, the amount of water consumption is estimated as follows:

Water Consumption in Project Townships for the First 5 Year					
	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Water Consumption (million tons per year)	1.97	2.09	2.22	2.34	2.46

- Taxes. VAT is 6%, Urban Maintenance and Construction Tax is 5%, Education Surcharge is 3%, and Income tax is 25%.
- Raw water, chemicals, power, and salary. The expenses of raw water, chemicals, power, and salary were estimated according to technical design and market prices.
- Depreciation and amortization. The annual depreciation rate for buildings is 2.375% and for equipment is 6.33%. Intangible assets are amortized over 50 years.
- Financial charges. This is related to the repayment of the Bank loan. The interest rate is 6% p.a. and the front-end fee is 0.25%.

72. The following table presents the results of the financial analysis of the 3 water supply facilities in Xiushan County. According to the analysis, these 3 water supply facilities are financially viable. Their operating expenses could be covered by the water tariffs (cost coverage ratio is more than 1) and the cash flows generated by the 3 water supply facilities are sufficient to service the debt (debt service coverage ratio is more than 1).

2014 Total 2012 2013 2015 2016 2020 2025 2029 80% 85% 90% 95% 100% 100% 100% 100% % of Capacity Net operating income 105.6 4.8 5.1 5.4 5.7 6.0 6.0 6.0 6.0 75.4 4.9 4.9 4.9 4.9 4.5 Total operating expenses 4.8 4.5 2.2 22.6 0.0 0.2 0.4 0.6 0.8 1.1 1.4 2.9 Net Profit Depreciation 30.9 2.0 2.0 2.0 2.0 2.0 2.0 2.0 0.4 Amortization 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Financial Charge 14.7 1.3 1.3 1.3 1.3 1.3 0.9 0.4 0,1

Summary of Financial Analysis on 3 Water Supply Facilities in Xiushan County (RMB million)

Debt Services	38.4	1.3	1.5	1.3	2.8	2.7	2.4	1.9	1.6
Cost coverage ratio		1.0	1.1	1.1	1.2	1.2	1.3	1.5	2.7
Debt Service Coverage Ratio		2.5	2.3	2.8	1.4	1.5	1.7	2.0	2.2

#### Water Supply in other two Counties

73. By using the same method discussed above, financial analyses of the water supply facilities in the two other counties were carried out. The results of these analyses are summarized below.

Water supply in Shizhu County. The current water tariff in Shizhou County is as follows:

For households	RMB1.86 m <sup>3</sup>
For industry and commerce	RMB2.20 $m^3$

74. However, the water tariff used in the financial analysis is RMB2.37  $m^3$ . This is a new average water tariff to be proposed to Shizhou County Government.

Summary of Financial Analysis on Water Suppry Facilities in Shishan County (RWD himbil)												
	Total	2010	2013	2020	2025	2028						
% of Capacity		20%	65%	100%	100%	100%						
Net operating income	59.0	2.0	3.0	3.3	3.3	3.3						
Total operating expenses	41.7	2.4	3.0	1.8	1.6	1.4						
Net Profit	12.9	-0.5	-0.08	1.1	1.3	1.4						
Depreciation	5.7	0.5	0.5	0.04	0.04	0.04						
Amortization	2.6	0.5	0.5									
Financial Charge	8.2	0.3	0.7	0.4	0.2	0.0						
Debt Services	19.3	0.7	0.7	1.1	0.9	0.8						
Cost coverage ratio		0.8	1.0	1.8	2.1	2.3						
Debt Service Coverage Ratio		1.4	2.4	1.4	1.7	1.9						

Summary of Financial Analysis on Water Supply Facilities in Shishan County (RMB million)

75. *Water Supply in Fengjie County*. The current water tariff in Fengjie County is summarized in the following:

For households	RMB1.85	65% of total water
consumption		
For government agencies	RMB2.95	5% of total water
consumption		
For industry	RMB2.90	12% of total water
consumption		
For commerce	RMB3.10	15% of total water
consumption		
For other uses	RMB3.15	3% of total water
consumption		

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	Total	2011	2012	2013	2014	2015	21	22
Net Operating Income	197.3	7.1	7.4	7.6	8./	8.3	12.6	12.9
Total Operating Expenses	108.4	6.0	6.0	6.0	6.0	5.9	4.8	4.8
Net Profit	66.7	0.8	1.0	1.3	1.5	1.8	5.9	6.1
Depreciation	468	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Amortization	3	0.0	0.0	0.0	0.0	0.0		
Financial Charge	14.6	1.3	1.3	1.3	1.3	1.2		
Debt Services	38.1	1.3	1.3	1.3	2.8	2.8		
Cost coverage ratio		1.2	1.2	1.3	1.3	1.4	2.6	2.7
Debt service coverage ratio		3.4	3.6	3.7	1.8	2.0	#DIV/0!	#DIV/0!

Summary of Financial Analysis on Water Supply Facilities in Fengjie County (RMB million)

### C. Financial Analysis at Entity Level

76. A key subcomponent regarding health is the Yubei People's Hospital development. This subcomponent is for the relocation, expansion, and equipping of Yubei People's Hospital and establishment of 10 CHSs under the administration of Yubei People's Hospital. It is a self-improvement program proposed by the management of Yubei People's Hospital. Therefore, the financial analysis of Yubei People's Hospital is made to assess if Yubei People's Hospital will have enough cash flow to implement its subcomponent and support the O&M of the assets built under the proposed Project.

77. The total investment of this subcomponent is about RMB242.3 million. This subcomponent will be financed by the Bank loan (about RMB121.1 million), government equity (about RMB20 million), and the internal cash flow (about RMB101.2 million). Construction of this subcomponent will start in 2010 and the assets will be put into operation by 2015.

78. Operating income of Yubei People's Hospital can be classified into four categories: medical income, drug income, fiscal subsidy, and others. The following table records the operating income of Yubei People's Hospital in 2007 and 2008.

Operating Incom	Operating income of Yuber People's Hospital (RWB minion)									
Operating Income	2007	2008								
Medical Income	42.15	51.55								
Drug Income	47.68	54.00								
Fiscal Subsidy	4.84	8.55								
Others	1.07	1.09								
Total Income	2102.74	2123.19								

**Operating Income of Yubei People's Hospital** (RMB million)

79. The operating expense of Yubei People's Hospital can also be divided into four groups: medical expenses, drug expenses, investments, and others. The following table shows the operating expenses of Yubei People's Hospital in 2007 and 2008.

Operating Expense	2007	2008	
Medical Expense	48.65	62.09	
Drug Expense	35.82	36.70	
Investment	0.05	2.00	
Others	0.28	0	
Total Expense	2091.8	2108.79	

**Operating Expense of Yubei People's Hospital** (RMB million)

80. Based on the above data, the operating income and expenses of Yubei People's Hospital for the next 6 years were projected using the following assumptions.

- Simple growth rate between 2007 and 2008 was calculated and used to project medical income and expense in 2009.
- Average growth rates from 2007 for each year were calculated and used to project medical income and expenses from 2010 to 2015. The average annual growth rates from 2007 to 2015 are from 20% to 22% for income and from 18% to 26% for expense.
- The fiscal subsidy and expenses were projected at the growth rate of 5% p.a.

81. The results of the projections of operating income and expenses for Yubei People's Hospital are shown in the table below.

		Actual		Projectio	n					
			2008	2009	2010	2011	2012	2013	2014	2015
Op	erating Income	95.74	115.19	133.18	179.81	230.33	283.63	339.01	396.00	454.26
	Medical	42.15	51.55	63.05	87.08	113.18	140.76	169.44	198.97	229.17
	Drug	47.68	54.00	61.16	83.31	107.25	132.48	158.66	185.57	213.06
	Subsidy	4.84	8.55	8.98	9.43	9.90	10.39	10.91	11.46	12.03
	Others	1.07	1.09							
Op	erating Expense	84.80	100.79	118.94	162.87	210.52	260.86	313.18	367.04	422.11
	Medical	48.65	62.09	79.24	110.32	144.17	180.00	217.31	255.75	295.09
	Drug	35.82	36.70	37.60	50.34	64.04	78.43	93.32	108.61	124.21
	Investment	0.05	2.00	2.10	2.21	2.32	2.43	2.55	2.68	2.81
	Others	0.28								
	Financial Charges				1.76	4.36	7.27	10.17	13.08	14.05
Sur	plus	10.94	14.40	14.24	15.19	15.45	15.51	15.66	15.88	18.10
Acc	cumulative Surplus	10.94	25.34	39.58	54.77	70.21	85.72	101.38	117.26	135.36

Projection for Income and Expense for Yubei People's Hospital (RMB million)

82. The results above show that by 2013, Yubei People's Hospital will have RMB101.38 million of accumulative surpluses after the payment of debt services of the Bank loan. Therefore, it will meet requirements to finance this subcomponent from internal cash of Yubei People's Hospital.

83. After the operation of the subcomponent, the financial condition of the Yubei People's Hospital will be improved and the service coverage will be enlarged. This will help Yubei People's Hospital increase its income. It was assumed that the income would be increased by 23% from 2016 to 2020, by 20% from 2021 to 2025, and by 18% from 2026 to 2029 whilst the expenses would be increased by 22% from 2016 to 2020 and by 20% from 2021 to 2029.

84. The following table summarizes the results of projections of income, expenses, and debt service payments of Yubei People's Hospital from 2016 through 2029. After payment of expenses and debt service, Yubei People's Hospital should have sufficient cash flow to meet its financial obligations.

	Total	2016	2021	2029
Income	34,476.54	543.94	1,494.01	6,006.29
Expense	32,301.05	514.49	1,363.66	5,852.81
Debt Service	207.97	21.15	16.30	8.55
Surplus	1,967.52	8.29	114.05	144.92

Results of Income, Expense, and Debt Service Projection for Yubei People's Hospital (RMB million)

### Annex 10: Safeguard Policy Issues CHINA: Chongqing Urban Rural Integration Project

1. The Bank team conducted safeguards screening during project preparation and confirmed that following Bank safeguard policies are triggered: (a) OP4.01: Environmental Assessment; (b) OP4.12: Involuntary Resettlement; and (c) OP4.37: Safety of Dams.

### **Resettlement Impact**

2. Six sub-projects of CURIP would envision land acquisition and population relocation in five counties/districts due to infrastructure construction for roads and buildings. They include construction of two roads in Xiushan and Tongliang counties, establishment of two water supply treatment plants in Xiushan and Shizhu counties, and construction of one hospital in Yubei district. Impact surveys and public consultation carried out in all the affected areas of the five counties identified communities, people and assets to be affected by the project's resettlement requirement. Overall, a total of 1008.7 mu of rural land would be requisitioned of which 679.07 mu is farmland. The land acquisition would affect 2,397 people of 617 households in 36 villages, while house demolition will affect 418 people in 101 households (of whom 260 people in 64 households would also lose some of their land). In addition, temporary land occupation would further impact on 213.95 mu of land (including 103.05 mu of farmland) and 515 people in 166 households. Table below shows the basic information of the CURIP resettlement component.

Items Sub- Projects	Land acquisi- tion (mu)	House demolition (rural) (square Meter)	Land temporarily occupied (mu)	People relocated by house demolition (persons)	People affected by land acquisition (persons)	People affected by temporary land occupation (persons)	Total resettle- ment costs (Y mil)
Road in Banan	619.02	3120	17.2	124	1611	0	88.56
Road in Xiushan	190	7230	20	166	197	31	25.77
Road in Tongliang	5.95	0	22.7	0	144	0	1.17
WSP in Shizhu	2	0	46.2	0	0	0	0.06
WSP in Xiushan	8	0	107.85	0	122	484	1.03
Hygiene in Yubei	183.73	5673.6	0	128	165	0	30.17
Total	1008.7	16023.6	213.95	418	2239	515	146.76

### **Compensation and Rehabilitation**

3. Based on socio-economic surveys and impact inventories for each of the six sub-projects, RAPs were prepared in each case under the guidance and assistance of resettlement experts from Chongqing Industrial and Commercial University. These RAPs set forth a series of measures for impact compensation and livelihood rehabilitation in consultation with local affected communities and households. All these measures aimed to minimize resettlement wherever possible, and, where resettlement could not be avoided, to ensure proper relocation and rehabilitation of the affected households so that they would be adequately compensated for their losses, and their incomes and living standards would be improved or at least restored to the preproject levels in a sustainable manner. In addition, affected public facilities would also be compensated or restored to their former levels, or improved. On the whole, based on the relevant national laws and municipal regulations, as well as in conformity with the Bank OP4.12 Involuntary Resettlement, the RAPs' compensation and rehabilitation measures were satisfactory to the people to be affected by the project.

4. Land compensation consisted of two parts: compensation for land and subsidy for labor resettlement. According to the Municipal demarcation of local farmland quality grades, land compensation in the sites of the six sub-projects varied from RMB8,000/mu to RMB16,000/mu. The part of labor resettlement subsidy was about RMB26,000-28,000. There were three ways to compensate for land loss while resettling/ restoring people's livelihoods: (a) Land-for-land- the remaining land would be reallocated among the village/hamlet and the entire land compensation would go to the village/ hamlet as a whole; (b) Cash compensation - land compensation payments would go to individual households who lost land in the case that the average landholding per person was higher than 0.5 mu after the land acquisition; and (c) Switch agricultural status to non-agricultural status most of the land compensation was used for social security programs of the affected people who switched from agricultural status to non-agricultural status where the average landholding per person was lower than 0.5 mu. The local authorities would provide training for these switched laborers' capacity building and job hunting.

5. Temporary occupation of farmland was compensated based on of green crops for two cultivation seasons per year, with the reclamation responsibility of the users after the occupation. Housing and other fixed assets including attachments to the land were compensated at replacement prices, as agreed by the owners (where compensation rates for houses were lower than local market prices, the project would make up the difference). Vulnerable households (10 under the project) would be helped by special program. Their housing could be assisted by village communities or solved by urban low-rental housing program as coordinated by the project. Meanwhile, their livelihood rehabilitation would be covered by local counties' allowance policies and monitored by the resettlement program under the project. All resettlement compensation and costs were carefully calculated for each item, and charged to the related subprojects' budgets.

### **Public Consultation and Disclosure**

6. During resettlement preparation, the PIUs for the six sub-projects and their resettlement consultants conducted repeated rounds of public consultation and surveys among the affected

communities and households. Each of the village communities and the relocated families was visited, consulted and surveyed; and the RAPs were developed and finalized taking into account the views of public of feedback from in-house interviews, as well as detailed site measurements and discussions to reach agreement on final calculations of property loss and compensation. In addition, a detailed sample socio-economic survey of 159 households (631 people), about 25% of the affected rural people, was conducted, based on which local livelihood rehabilitation was assessed and planned. Overall, the RAPs describe in detail the rationale and the time-bound steps for adequate compensations and assistance provision to the affected households and villages during resettlement implementation. In order to ensure resettlement implementation in accordance with the RAPs, internal and external monitoring programs were developed with both process and impact indicators. Resettlement consultants from the Chongqing Industrial and Commercial University combined and summarized the RAPs into a Consolidated RAP (both in Chinese and English) for CURIP.

7. County-level individual RAPs were placed in county PMUs and local libraries during September 2009 for disclosure to the public. According to the RAPs, six months prior to the project start up, resettlement announcements would be posted and resettlement booklets would be sent to all affected villages , and project resettlement related information including policies, rights, compensation criteria, appeal procedures together with the RAPs themselves, would be publicized and disseminated through broad media channels. Three months before resettlement, village meetings would again be held for upfront mobilizing and organizing resettlement implementation. The Consolidated RAP was available in the Bank InfoShop in September 2009.

### **OP4.10: Applicability of Indigenous People Policy**

8. The Bank task team conducted extensive social screening of the project areas and determined that the Bank's social safeguard OP4.10 on Indigenous Peoples does not apply to this project. There are some Tujia and Miao ethnic minority groups who are present in the project areas, e.g., in Xiushan and Shizhu Counties. However, they are not really culturally distinctive from other local Han communities but are intermingled and acculturated with the Han community. All these communities together constitute a common local culture in terms of same language, production mode, living habits and folk beliefs, as well as self-perception. Neither the Tujia nor Miao groups appear to be vulnerable to disadvantageous situation in local development in general and as result of the project process in particular. Therefore, both Tujia and Miao ethnic groups in the project areas do not fall in the definition of Indigenous Peoples as described out in OP4.10, and this safeguard policy is therefore not triggered.

### **OP4.01: Environmental Assessment**

9. The objective of the project is to improve environmental conditions and infrastructure service in selected districts/counties, townships, and villages for local residents, and facilitate employment creation. The Bank policy OP 4.01 Environmental Assessment is triggered and the project has been classified as Category B. Ten Environmental Impact Assessment (EIA) documents were prepared for the proposed project components described in Annex 4, and in each EIA document, the associated Environmental Management Plan (EMP) has also been developed. Based on each EIA document, an English language Consolidated Environment

Assessment (CEA) Summary Report has been compiled to present the key issues of the subproject EIA documents. All documents have been prepared on the basis of Chinese legal and policy framework for environmental protection, master plans and environmental plans as well as applicable Bank safeguard policies.

10. The EIA documents identified potential environmental benefits and consequences of the project, proposed measures to avoid, mitigate or otherwise compensate adverse environmental impacts during construction and operation, and allowed incorporation of appropriate measures in the design to mitigate negative impacts to a minimum and acceptable level. Documents have been prepared on the basis of the country's legal and policy framework for pollution control and environmental protection, master plans and environmental plans, as well as applicable World Bank safeguard policies. The EIA reports applied methodologies set out in various technical guidelines issued by the Ministry of Environmental Protection (MEP) and World Bank safeguard policies/technical sourcebooks. The scope of the project covered by the EIA report is based on project feasibility study reports for each of the project components.

11. Baseline Environmental Condition: Chongqing is located in the southwest of China, on the upper reaches of Yangtze River, extending 470km east to west and 450km north to south, bordering Hubei and Hunan Provinces in the east, Guizhou Province in the south, Sichuan Province in the west and Shaanxi Province in the north, with a total area of 82,400km<sup>2</sup>, including 647.78km<sup>2</sup> of urban areas. Situated east of the Sichuan Basin, Chongqing is surrounded respectively by Daba Mountain, Wushan Mountain, Wuling Mountain and Dalou Mountain in the north, east and south, where hills and mountains are the dominating geomorphic plus large areas of hillside fields. Chongqing is thus renowned as Mountain City. Rivers running through Chongqing include the Yangtze River, Jialing River, Wujiang River, Fujiang River, Qijiang River and Daning River. The main Yangtze River travels through Chongqing from west to east with a total distance of 665km.

12. Though great achievements were obtained in the socioeconomic development, Chongqing still faces enormous challenges. There are still 16 million people living in rural areas. Problems, such as lack of clean drinking water, inadequate accessibility to road and transportation for production, and lack of sound health care and educational services, still exist.

13. *Expected Environmental Benefits*: The following environmental benefits are expected from the project: reliable potable water supply to more than 109,000 people in 3 counties who currently suffer water shortage and poor water quality; improved transportation and connectivity of about 473,000 people in 4 counties, providing improved access to the local public and thus promoting economic growth; and improved access to basic health services in Yubei District for more than 420,000 local people.

14. *Impact Assessment and Mitigation Measures*: During the construction phase, adverse impacts include wastewater discharge from construction camps, airborne dust, noise, traffic disruption and disposal of spoiled materials. In the EMPs, contractors are required to water construction sites during dry and windy seasons, develop careful plans to mitigate noisy construction activities and avoid/ban night time construction, maintain equipment in good operating condition, develop temporary traffic plans to detour traffic around construction sites,

etc. Key mitigation measures during construction and operation have been proposed and agreed, and are described in the EMPs.

15. *Alternative Analysis*: Alternative analysis was carried out for the proposed components as part of the feasibility study, such as road alignment and route, location of proposed water works, and treatment technologies, etc. In the EIA Summary report, this work has been described.

16. *Public Consultations and Information Disclosure*: In accordance with World Bank policies, public consultation and the information disclosure have been conducted during the preparation of the environmental assessment. Three major forms of public consultation were conducted, including public consultation meeting, interviews with project affected people, and questionnaire survey. Subproject EIAs provide information on public consultation, including a copy of the questionnaire and a summary of the results. The above mentioned activities were conducted from March to July 2009.

17. Chinese language EIA documents have been displayed locally several times in April and May 2009 through various means, e.g., internet <u>WWW.CQMSY.COM</u>, <u>http://www.ppeia.com</u>, information board in local communities, notice through villages, etc. The English language CEA summary report was disclosed in the Bank's InfoShop on September 14, 2009.

18. *Environment Management Plan (EMP)*: An EMP has been developed as part of the EIA report. Based on information available, a consolidated EMP chapter has been included in the CEA summary report. A section of the EMP includes the policy basis and applicable environmental standards, environmental management system, mitigation measures (as listed in above section), monitoring plans, institutional arrangements, capacity building and estimated costs for mitigation measures and monitoring programs, for both the construction and operation phases.

19. The EMP also includes environmental monitoring programs for both construction and operation phases. Parameters to be monitored include noise, dust, water quality, and solid waste disposal. To ensure strict and efficient implementation of the mitigation measures proposed, including the environmental obligations of contractors during construction, a program of monitoring activities has been developed as part of the EMP. Project progress reports furnished by the PMO will include a section on EMP implementation and related environmental monitoring reports.

### **OP4.37: Safety of Dams**

20. **Safety of Dams:** The Dam Safety Safeguard Policy (OP 4.37) is triggered by the Project because water supply systems to be constructed by the Project would draw directly from a number of reservoirs controlled by existing dams; also, the project sites are located downstream from a number of existing dams, and failure of the upstream dams could cause extensive damage to (or failure of) some or all the investment under the Project. A total of 9 dams trigger the policy. All 9 dams have been remedied. Details are listed in Table 10-1.

21. The Municipality will hire an independent dam safety expert (DSE), under the Project Management consultancy to assist the CPMO and the Bank to ensure that the project is implemented in compliance with the Bank's policy on safety of dams. The DSE will: (a) inspect and evaluate the safety status of existing dams, their appurtenance, and their performance history; (b) review and evaluate the compliance of the Project Dams' operation and maintenance procedures with the related national standards and the Bank's Dam Safety Policy; and (c) provide written reports of findings and recommendations for any remedial work to ensure safety of the existing dams.

22. The Chinese Government has issued guidelines and regulations for dam safety management including Reservoir Dam Safety Management Regulation, Regulations on Reservoir Dam Safety Review, Guidelines for Dam Safety Review, Guidelines for Emergency Preparedness Plan, and Guidelines for Operation, Maintenance and Surveillance of Dams. During Project implementation, the Bank, together with the DSE, will monitor the safety status, operation and maintenance and emergency preparedness of all these dams and supervise the implementation of further remedial work of these dams, if any, to ensure that the Project complies with the policy.

No.	Name	Location	Height (m)	Type of Dam	Reservoir Capacity (million m3)	Latest Safety Review	Dam Safety Class	Remedial works	Reservoir Administrative Agency	Next Step Activities
1	Huangshuigu 3 <sup>rd</sup> Dam	Shizhu County	4.47	Stone Gravity dam	0.2	2009	В	Remedy works completed in September 2009	Shizhu County Water Resources Bureau	Safety review in 2017
2	Meijiagou Dam	Qijiang County	32	Stone gravity dam	2.97	2008	В	Remedy works completed in December 2009	Meijiaguo Reservoir Management Station	Acceptance by December, 2010
3	Daqiaokou Dam	Qijiang County	23.2	Arch dam	0.96	2009	В	Remedy works completed in February, 2009	Daqiaokou Reservoir Management Station	Safety review in 2017
4	Huangjing Dam	Fengjie County	47.3	Concrete Face Rock-filled Dam	3.63	2008	В	Remedy works completed in September 2008	Huangjing Reservoir Management Station	Safety review in 2016
5	Zhongling Dam	Xiushan County	54.46	Clay core earth and rock dam	32.3	2003	В	Remedy works completed in 2003	Zhongling Reservoir Management Bureau	Safety review in 2011
6	Shuaijia Dam	Xiushan County	18.2	Stone masonry gravity dam	6.8	2009	В	Remedial works completed in September, 2009	Shuaijia Reservoir Management Bureau	Safety review in 2017
7	Dayandong Dam	Yongchuan District	18.5	Homogeneous earth dam	0.9	2008	В	Remedial works completed in April, 2008	Dayandong Reservoir Management Bureau	Safety review in 2016
8	Shuibatang Dam	Qijiang County	23	Earth dam	0.98	2009	В	Remedy works completed in February, 2009	Shuibatang Reservoir Management Station	Safety review in 2017
9	Xiguo Dam	Tongliang County	20	Loess Homogeneous Dam	5	2006	В	Remedy works completed in 2006	Xiguo Reservoir Management Bureau	Safety review in 2014

# Table 10-1: Dam Safety Plan for the Chongqing Urban Rural Integration Project

## Annex 11: Project Preparation and Supervision

### CHINA: Chongqing Urban Rural Integration Project

	Planned	Actual
PCN review	01/13/2009	01/12/2009
Initial PID to PIC	02/04/2009	01/21/2009
Initial ISDS to PIC	02/04/2009	06/08/2009
Appraisal	11/02/2009	11/02/2009
Negotiations	03/15/2010	04/27/2010
Board/RVP approval	04/27/2010	
Planned date of effectiveness	06/28/2010	
Planned date of mid-term review	06/15/2013	
Planned closing date	06/15/2015	

Key institutions responsible for preparation of the project:

- i) Chongqing Project Management Office;
- ii) Chongqing Municipal Finance Bureau; and
- iii) Chongqing Municipal Development & Reform Commission

Bank staff and consultants who worked on the project included:

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Sameh El-Saharty	Peer Reviewer, Sr. Health Specialist	SASHN

## Annex 12: Documents in the Project File CHINA: Chongqing Urban Rural Integration Project

- 1. Resettlement Action Plan
- 2. Environmental Impact Assessments and Environmental Management Plans
- 3. Consolidated Environment Assessment Report
- 4. Project Detailed Financial Analysis (Appraisal document)
- 5. Project Detailed Technical Aspects (Appraisal document
- 6. Project Detailed Procurement Arrangements (Appraisal document)
- 7. Chongqing Rural Urban Linkages Study Economic Sector Work, 2009.

### Annex 13: Statement of Loans and Credits CHINA: Chongqing Urban Rural Integration Project

			Origir	al Amount i	n US\$ Mil	lions			expecte	nce between and actual ursements
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'o
P091950	2009	CN-Guizhou Cultural and Natural Heritage	60.00	0.00	0.00	0.00	0.00	59.85	0.00	0.00
P096556	2009	CN-Eco-Farming	120.00	0.00	0.00	0.00	0.00	114.70	5.00	0.00
P096707	2009	CN - GD Tech&Vocational ED and Training	20.00	0.00	0.00	0.00	0.00	19.95	0.75	0.00
P096812	2009	CN-Yunnan Urban Env	90.00	0.00	0.00	0.00	0.00	85.78	-4.00	0.00
P096923	2009	CN-Shanghai APL III	200.00	0.00	0.00	0.00	0.00	199.50	0.00	0.00
P096926	2009	CN-Jiangsu Water and Wastewater Project	130.00	0.00	0.00	0.00	0.00	129.68	0.00	0.00
P100968	2009	CN-Shanxi Coal Bed Methane Development	80.00	0.00	0.00	0.00	0.00	79.80	0.20	0.00
P101258	2009	CN-Hubei Yiba Highway	150.00	0.00	0.00	0.00	0.00	149.63	0.00	0.00
P101829	2009	CN Xining Flood and Watershed Mgmt	100.00	0.00	0.00	0.00	0.00	99.75	4.00	0.00
P101988	2009	CN-Jiangxi Shihutang Navi & Hydropower	100.00	0.00	0.00	0.00	0.00	83.58	32.17	0.00
P114107	2009	CN-Wenchuan Earthquake Recovery Project	710.00	0.00	0.00	0.00	0.00	648.00	-62.00	0.00
P112359	2009	CN-NanGuang Railway	300.00	0.00	0.00	0.00	0.00	299.25	0.00	0.00
2107559	2009	CN-Guizhou-Guangzhou Railway	300.00	0.00	0.00	0.00	0.00	299.25	0.00	0.00
P085376	2008	CN-Migrant Skills Dev. and Employment	50.00	0.00	0.00	0.00	0.00	47.85	0.97	0.00
P091949	2008	CN-Gansu Cultural & Natural Heritage	38.40	0.00	0.00	0.00	0.00	33.24	1.65	0.00
P084874	2008	CN- Energy Efficiency Financing	200.00	0.00	0.00	0.00	0.00	150.07	0.34	0.00
P084437	2008	CN-Rural Health	50.00	0.00	0.00	0.00	0.00	46.18	-2.20	0.00
P092631	2008	CN-Xi'an Sustainable Urban Transport	150.00	0.00	0.00	0.00	0.00	139.63	-10.00	0.00
P093882	2008	CN-Shandong Flue Gas Desulfurization	50.00	0.00	0.00	0.00	0.00	39.92	16.94	0.00
P093963	2008	CN-Guiyang Transport	100.00	0.00	0.00	0.00	0.00	59.28	19.77	0.00
P087224	2008	CN-Han River Urban Environment	84.00	0.00	0.00	0.00	0.00	81.55	21.99	0.00
P099112	2008	CN-Anhui Highway Rehab & Improvement	200.00	0.00	0.00	0.00	0.00	121.91	-48.59	0.00
P099062	2008	CN-ShiZheng Railway	300.00	0.00	0.00	0.00	0.00	299.25	20.00	0.00
P096925	2008	CN- Bengbu Integrated Environment Improv	100.00	0.00	0.00	0.00	0.00	94.54	8.79	0.00
P099224	2008	CN-Liaoning Med. Cities (LMC) III	191.00	0.00	0.00	0.00	0.00	180.52	39.98	0.00
P088964	2007	CN-Guangxi Integrated Forestry Dev	100.00	0.00	0.00	0.00	0.00	23.18	-47.82	0.00
P091020	2007	CN-Fujian Highway Sector Investment	320.00	0.00	0.00	0.00	0.00	75.10	-68.10	0.00
P092618	2007	CN-LIAONING MED CITIES INFRAS 2	173.00	0.00	0.00	0.00	0.00	162.57	31.10	0.00
P095315	2007	CN-W. Region Rural Water & Sanitation	25.00	0.00	0.00	0.00	0.00	18.52	0.08	0.00
P096285	2007	CN-MSE Finance	100.00	0.00	0.00	0.00	0.00	5.00	5.00	0.00
P083322	2007	CN-SICHUAN URBAN DEV	180.00	0.00	0.00	0.00	0.00	124.19	85.19	0.00
P075613	2007	CN-Shaanxi Ankang Road Development	300.00	0.00	0.00	0.00	0.00	124.01	-36.30	0.00
P081776	2007	CN-GUANGDONG/PRD2	96.00	0.00	0.00	0.00	0.00	84.31	17.31	0.00
P086515	2007	CN-3rd National Railway	200.00	0.00	0.00	0.00	0.00	56.46	-36.11	0.00
2077752	2007	CN-SHANDONG ENVMT 2	147.00	0.00	0.00	0.00	0.00	81.52	-22.98	0.00
2093906	2006	CN-3rd Jiangxi Hwy	200.00	0.00	0.00	0.00	0.00	10.33	-24.67	0.00

P081348	2006	CN-HENAN TOWNS WATER	150.00	0.00	0.00	0.00	0.00	117.68	50.18	0.00
P096158	2006	CN-Renewable Energy II (CRESP II)	86.33	0.00	0.00	0.00	1.65	37.98	31.36	0.00
P081255	2006	CN-Changjiang/Pearl River Watershed Reha	100.00	0.00	0.00	0.00	0.00	88.57	48.57	0.00
P075732	2006	CN-SHANGHAI URBAN APL2	180.00	0.00	0.00	0.00	0.00	78.09	33.09	0.00
P099992	2006	CN-Liaoning Medium Cities Infrastructure	218.00	0.00	0.00	0.00	0.00	154.73	46.73	0.00
P070519	2006	CN-Fuzhou Nantai Island Peri-Urban Dev	100.00	0.00	0.00	0.00	0.00	72.49	34.99	0.00
P086629	2006	CN-Heilongjiang Dairy	100.00	0.00	0.00	0.00	0.00	74.43	73.93	0.00
P085333	2006	CN-5th Inland Waterways	100.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00
P085124	2006	CN-Ecnomic Reform Implementation	20.00	0.00	0.00	0.00	0.00	14.18	14.18	0.00
P069862	2005	CN - Agricultural Technology Transfer	100.00	0.00	0.00	0.00	0.00	49.17	42.67	0.00
P075730	2005	CN-HUNAN URBAN DEV	172.00	0.00	0.00	0.00	0.00	115.44	81.44	0.00
P057933	2005	CN-TAI BASIN URBAN ENVMT	61.00	0.00	0.00	0.00	0.00	6.96	7.26	0.00
P071094	2005	CN - Poor Rural Communities Development	100.00	0.00	0.00	0.00	0.00	27.56	25.06	0.00
P081161	2005	CN-CHONGQING SMALL CITIES	180.00	0.00	0.00	0.00	0.00	60.37	36.62	0.00
P086505	2005	CN-NINGBO WATER & ENVMT	130.00	0.00	0.00	0.00	0.00	9.34	-13.16	0.00
P081346	2005	CN-LIUZHOU ENVIRONMENT MGMT	100.00	0.00	0.00	0.00	0.00	24.11	10.56	0.00
P066955	2004	CN-ZHEJIANG URBAN ENVMT	133.00	0.00	0.00	0.00	0.00	51.02	51.02	-4.98
P065463	2004	CN-Jiangxi Integrated Agric. Modern.	100.00	0.00	0.00	0.00	0.00	8.60	6.86	0.00
P065035	2004	CN-Gansu & Xinjiang Pastoral Development	66.27	0.00	0.00	0.00	0.00	0.92	0.44	0.00
P077137	2004	CN-4th Inland Waterways	91.00	0.00	0.00	0.00	0.46	6.71	6.16	5.71
P075728	2004	CN-GUANGDONG/PRD UR ENVMT	128.00	0.00	0.00	0.00	0.64	63.91	64.55	0.00
P068058	2003	CN-Yixing Pumped Storage Project	145.00	0.00	0.00	0.00	0.00	32.11	32.11	0.00
P070191	2003	CN-SHANGHAI URB ENVMT APL1	200.00	0.00	0.00	0.00	0.00	35.40	35.40	0.00
P040599	2003	CN-TIANJIN URB DEV II	150.00	0.00	0.00	0.00	0.00	90.82	87.82	32.06
P071147	2002	CN-Tuberculosis Control Project	104.00	0.00	0.00	0.00	2.17	3.55	5.72	0.00
		Total:	8,729.00	0.00	0.00	0.00	4.92	5,563.81	773.84	32.79

### CHINA STATEMENT OF IFC's Held and Disbursed Portfolio In Millions of US Dollars

			Comr	nitted					
			IFC				IFC		
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2002	ASIMCO	0.00	10.00	0.00	0.00	0.00	10.00	0.00	0.00
2006	ASIMCO	0.00	0.00	4.12	0.00	0.00	0.00	3.61	0.00
2005	BCCB	0.00	59.21	0.00	0.00	0.00	59.03	0.00	0.00
2003	BCIB	0.00	0.00	12.04	0.00	0.00	0.00	0.00	0.00
2006	BUFH	8.14	0.00	0.00	0.00	8.14	0.00	0.00	0.00
2005	Babei	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00
	Babei Necktie	11.00	0.00	0.00	6.00	8.94	0.00	0.00	4.88
1999	Bank of Shanghai	0.00	21.76	0.00	0.00	0.00	21.76	0.00	0.00

2000	Bank of Shanghai	0.00	3.84	0.00	0.00	0.00	3.84	0.00	0.00
2002	Bank of Shanghai	0.00	24.67	0.00	0.00	0.00	24.67	0.00	0.00
2005	BioChina	0.00	3.70	0.00	0.00	0.00	3.13	0.00	0.00
2002	CDH China Fund	0.00	2.02	0.00	0.00	0.00	0.00	0.00	0.00
2005	CDH China II	0.00	17.99	0.00	0.00	0.00	11.38	0.00	0.00
2006	CDH Venture	0.00	20.00	0.00	0.00	0.00	0.51	0.00	0.00
2005	CT Holdings	0.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00
2004	CUNA Mutual	0.00	10.53	0.00	0.00	0.00	0.00	0.00	0.00
2006	Capital Today	0.00	25.00	0.00	0.00	0.00	0.32	0.00	0.00
2005	Changyu Group	0.00	18.07	0.00	0.00	0.00	18.07	0.00	0.00
1998	Chengdu Huarong	3.36	3.20	0.00	3.13	3.36	3.20	0.00	3.13
2004	China Green Ener	20.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00
2004	China Re Life	0.00	0.27	0.00	0.00	0.00	0.27	0.00	0.00
1994	China Walden Mgt	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
2006	Chinasoft	0.00	0.00	15.00	0.00	0.00	0.00	10.00	0.00
2004	Colony China	0.00	15.31	0.00	0.00	0.00	9.29	0.00	0.00
2004	Colony China GP	0.00	0.84	0.00	0.00	0.00	0.49	0.00	0.00
2006	Conch	81.50	40.93	0.00	0.00	81.50	0.00	0.00	0.00
2006	Dagang NewSpring	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	Darong	10.00	0.24	0.00	8.00	6.67	0.24	0.00	5.33
2006	Deqingyuan	0.00	2.85	0.00	0.00	0.00	2.85	0.00	0.00
1994	Dynamic Fund	0.00	2.21	0.00	0.00	0.00	2.01	0.00	0.00
2007	Epure	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	Fenglin	17.64	0.00	6.00	13.47	13.64	0.00	6.00	12.53
2006	Fenglin HJ MDF	0.23	0.00	0.00	3.27	0.00	0.00	0.00	0.00
2005	Five Star	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
2006	GDIH	50.85	0.00	0.00	0.00	50.85	0.00	0.00	0.00
2003	Great Infotech	0.00	1.73	0.00	0.00	0.00	1.03	0.00	0.00
2006	Hangzhou RCB	0.00	10.85	0.00	0.00	0.00	0.00	0.00	0.00
2005	HiSoft Tech	0.00	4.00	0.00	0.00	0.00	3.00	0.00	0.00
2006	HiSoft Tech	0.00	4.34	0.00	0.00	0.00	1.74	0.00	0.00
2004	IB	0.00	52.18	0.00	0.00	0.00	52.18	0.00	0.00
2004	Jiangxi Chenming	40.00	12.90	0.00	18.76	40.00	12.90	0.00	18.76
2006	Launch Tech	0.00	8.35	0.00	0.00	0.00	8.33	0.00	0.00
2001	Maanshan Carbon	5.25	2.00	0.00	0.00	5.25	2.00	0.00	0.00
2005	Maanshan Carbon	11.00	1.00	0.00	0.00	5.00	1.00	0.00	0.00
2005	Minsheng	15.75	0.00	0.00	0.00	7.00	0.00	0.00	0.00
2006	Minsheng & IB	25.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	Minsheng Bank	0.00	23.50	0.00	0.00	0.00	23.50	0.00	0.00
2005	Minsheng Bank	0.00	2.80	0.00	0.00	0.00	2.79	0.00	0.00
2001	NCCB	0.00	8.94	0.00	0.00	0.00	8.82	0.00	0.00
1996	Nanjing Kumho	0.00	3.81	0.00	0.00	0.00	3.81	0.00	0.00
2004	Nanjing Kumho	31.38	2.23	0.00	0.00	31.38	2.23	0.00	0.00
2006	Neophotonics	0.00	0.00	10.00	0.00	0.00	0.00	10.00	0.00
2001	New China Life	0.00	5.83	0.00	0.00	0.00	5.83	0.00	0.00
2005	New Hope	0.00	0.00	45.00	0.00	0.00	0.00	0.00	0.00
1995	Newbridge Inv.	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00
2005	North Andre	8.00	6.74	0.00	0.00	0.00	4.25	0.00	0.00
2003	PSAM	0.00	2.01	0.00	0.00	0.00	0.00	0.00	0.00

	RAK China	13.00	0.00	0.00	0.00	13.00	0.00	0.00	0.00
2006	Renaissance Sec	0.00	0.00	20.04	0.00	0.00	0.00	0.00	0.00
2006	Rongde	0.00	35.00	0.00	0.00	0.00	31.38	0.00	0.00
	SAC HK Holding	0.00	1.60	0.00	0.00	0.00	1.00	0.00	0.00
2003	SAIC	12.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00
2006	SBCVC	0.00	20.00	0.00	0.00	0.00	2.00	0.00	0.00
2000	SEAF SSIF	0.00	3.74	0.00	0.00	0.00	3.37	0.00	0.00
	SH Keji IT	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	SHCT	38.18	0.00	0.00	28.64	29.04	0.00	0.00	21.78
2004	SIBFI	0.14	0.07	0.00	0.00	0.00	0.07	0.00	0.00
1998	Shanghai Krupp	19.25	0.00	0.00	36.75	19.25	0.00	0.00	36.75
2006	Shanshui Group	50.00	5.50	2.20	0.00	50.00	5.50	0.00	0.00
1999	Shanxi	12.61	0.00	0.00	0.00	12.61	0.00	0.00	0.00
	SinoSpring	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
	Stora Enso	20.83	0.00	0.00	4.17	11.00	0.00	0.00	0.00
2005	Stora Enso	29.17	0.00	0.00	20.83	0.00	0.00	0.00	0.00
2006	Stora Enso	50.00	0.00	0.00	175.00	0.00	0.00	0.00	0.00
2006	TBK	4.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00
2006	VeriSilicon	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
	Wanjie High-Tech	9.89	0.00	0.00	0.00	9.89	0.00	0.00	0.00
2004	Wumart	0.00	1.62	0.00	0.00	0.00	1.62	0.00	0.00
2003	XACB	0.00	17.95	0.00	0.00	0.00	0.64	0.00	0.00
2004	Xinao Gas	25.00	10.00	0.00	0.00	25.00	10.00	0.00	0.00
2006	Zhejiang Glass	50.00	24.96	0.00	18.00	0.00	0.00	0.00	0.00
2003	Zhengye-ADC	10.43	0.00	0.00	4.87	10.43	0.00	0.00	4.87
2002	Zhong Chen	0.00	4.78	0.00	0.00	0.00	4.78	0.00	0.00
2006	Zhongda_Yanjin	21.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total portfolio:	733.58	577.30	181.40	340.89	470.95	371.06	29.61	108.03

		<b>Approvals Pending Commitment</b>							
FY Approval	Company	Loan	Equity	Quasi	Partic.				
2002	SML	0.00	0.00	0.00	0.00				
2004	NCFL	0.00	0.00	0.02	0.00				
2007	Xinao CTC	0.04	0.01	0.00	0.14				
2004	China Green	0.00	0.00	0.01	0.00				
2006	Launch Tech	0.01	0.00	0.00	0.00				
2005	MS Shipping	0.00	0.01	0.00	0.00				
2003	Peak Pacific 2	0.00	0.01	0.00	0.00				
	Total pending commitment:	0.05	0.03	0.03	0.14				

### Annex 14: Country at a Glance

### **CHINA:** Chongqing Urban Rural Integration Project China at a plance

<u> </u>	_nina	a at a	a gla	nce	9/24/08
POVERTY and SOCIAL			East Asia &	Lower- middle-	
POVERTT and SOCIAE		China	Pacific	income	Developmentdiamond*
2007					
Population, mid-year (millions)		1,320.0	1,914	3,437	Life expectancy
GNI per capita (Atlas method, US\$)		2,360	2,180	1,887	Life expectancy
GNI (Atlas method, US\$ billions)		3,120.9	4,174	6,485	т
A verage annual growth, 2001-07					
Population (%)		0.6	0.8	11	
Labor force (%)		0.9	12	15	GNI Gross
					per primary
Most recent estimate (latest year avai		01-07)			capita enrollment
Poverty (% of population below national povert	ty line)	42		42	Î Î
Urban population (% of total population)		42 72	43 71	42 69	
Life expectancy at birth (years)		20	24	69 41	_ <u></u>
Infant mortality <i>(per 1,000 live births)</i> Child malnutrition <i>(% of children under 5)</i>		20	24 13	41 25	
Access to an improved water source (% of pop		88	87	20 88	Access to improved water source
Literacy (% of population age 15+)	uialioni	00	07 91	00 89	
Literacy (%of population age 15+) Gross primary enrollment (%of school-age po	nulation)	111	91 110	89 111	China
Male	pulation)	112	111	112	
Female		111	109	109	Lower-middle-income group
			103	105	L
KEY ECONOMIC RATIOS and LONG-T					
	1987	1997	2006	2007	Economic ratios*
GDP (US\$ billions)	268.2	952.7	2,657.9	3,280.1	
Gross capital formation/GDP	37.3	37.9	44.4	-	
Exports of goods and services/GDP	16.4	21.8	39.9		Trade
Gross domestic savings/GDP	37.3	42.4	52.3		_
Gross national savings/GDP	37.3	41.8	53.8		I T
Current account balance/GDP	0.0	39	94	115	
Interest payments/GDP	0.4	0.6	01		Domestic Capital
Total debt/GDP	13.2	15.4	12.1		savings formation
Total debt service/exports	8.5	8.5	2.4		I T
Present value of debt/GDP			119		
Present value of debt/exports			27.7		
					Indebtedness
1987-97	1997-07	2006	2007	2007-11	
(average annual growth) GDP 10.3	9.5	11.6	119	10.4	China
	22.7	23.3	22.8	15.8	Lower-midale-income group
GDP per capita 8.9	8.7	11.0	112	9.7	Lower-middle-income group
	<b>1987</b>	1997	2006	2007	Growth of capital and GDP (%)
(%of GDP)					20 -
Agriculture	26.8	<b>1</b> 8.1	117		15
ndustry	43.9	47.5	48.1		
Manufacturing	34.7	33.2			
Services	29.3	34.4	40.2		
ousehold final consumption expenditure	48.7	43.4	33.5		
General gov't final consumption expenditure	14.0	14.2	14.2		02 03 04 05 06 07
mports of goods and services	16.4	17.3	32.1		GCF GDP
					L
	10 9 7 0 7	1007 07	2006	2007	

1987-97 1997-07 2006 🗖 2007 Growth of exports and imports (%) (average annual growth) 40 44 37 5.0 40 Agriculture 30 Industry 13.9 10.5 12.5 13.4 . M anufacturing 10.3 13.1 20 12.4 12.2 Services 9.4 10.2 10 Household final consumption expenditure 9.8 3.8 -2.5 0 General gov't final consumption expenditure 10.6 9.5 10.9 02 04 03 Gross capital formation 12.2 11.5 13.2 14.3 Exports 13.0 14.3 Imports of goods and services 19.1 18.2

Note: 2007 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

\* 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.

07

05 06

Imports

97

China

~

06 07 - CPI

05 06 07

> 06 07

E: 27,612

F: 94,118

E - Bilateral F - Private G - Short-term

	1987	1997	2006	2007	Inflation (%)
Domestic prices					8 -
(%change)	7.0				
Consumer prices Implicit GDP deflator	7.3 5.1	2.8 1.5	1.5 3.3	4.6 5.2	
	0.1	1.0	0.0	52	
Government finance					
(% of GDP, includes current grants)	0.0	11.0	18.3	19,4	
Current revenue Current budget balance	-16.7	-0.1	3.0	3.0	-2 02 03 04 05 06
Overall surplus/deficit	-22.1	-1.7	-0.7	-0.9	GDP deflator — CP
TRADE					
	1987	1997	2006	2007	Export and import levels (US\$ mill.)
(US\$ millions) Total amonto (fab)	20 427	40.0 70.0	060 072		
Totalexports (fob) Food	39,437 4,781	182,792 11,075	969,073 25,722		1,500,000
M ineral fuels, lubricants, and related materials	4,544	6,987	17,776		
M anufactures	26,206	158,839	916,147		1,000,000
Total imports (cif)	43,216	142,370	791,614		
Food	2,443	4,304	9,997		500,000
Fuel and energy	539	10,306	89,002		
Capital goods	14,607	52,774	357,107		
Export price index (2000=100)	68	119	107		01 02 03 04 05 06
Import price index (2000=100)	84	103	124		Exports Imports
Terms of trade (2000=100)	81	116	87		,
BALANCE of PAYMENTS					
(ICC millions)	1987	1997	2006	2007	Current account balance to GDP (%)
(US\$ millions) Exports of goods and services	43,868	207,239	1,061,681		15 🛨
Imports of goods and services	43,950	164,416	852,769		10
Resource balance	-82	42,823	208,912		
Net income	-215	-11,004	11,755		10 •
Net current transfers	-215	-1,004 5,143	29,200		
Current account balance	-73	36,962	249,867	377,812	
Financing items (net)	1,733	-1,105	-2,842	-20,000	
Changes in net reserves	-1,660	-35,857	-247,025	-357,812	
Memo:					01 02 03 04 03 00
Reserves including gold (US\$ millions)	22,439	146,439	1,046,465	1,427,812	-
Conversion rate (DEC, local/US\$)	4.5	8.3	8.0	7.6	
EXTERNAL DEBT and RESOURCE FLC	ws				
	1987	1997	2006	2007	Composition of 2006 debt (US\$ mill.)
(US\$ millions)	25.240	440.007	200.045		
Total debt outstanding and disbursed IBRD	35,340 1,427	146,697 8,239	322,845 11,415	11,762	A: D: 0.007
IDA	1,427	7,830	9,997	10,151	A. B: 9,997 11,415 D: 6,326
				10, 101	
Total debt service	3,852	18,445	27,877		E: 27,61
IBRD IDA	208 12	858 81	1,443 316	1,561 349	
Composition of net resource flows					G:
Official grants	210	266	363		173,377
Official creditors	626	4,315	901		F:
Private creditors	5,462	8,134	7,500		
Foreign direct investment (net inflows) Portfolio equity (net inflows)	2,314 0	44,237 5,657	78,095 42,861		
World Bank program			-		
Commitments	1,306	2,425	1,154	1,361	A - IBRD E - Bila
Disbursements	702	2,275	1,169	1,208	B - IDA D - Other multilateral F - Priv
Principal repayments	97	377	1,144	1,184	C - IMF G - Sho
Net flows	605	1,898	25	24	l
Interest payments	124	562	615	727	
Interest payments Net transfers	124 482	562 1,335	615 -590	727 -703	

Note: This table was produced from the Development Economics LDB database.

9/24/08

# Annex 15: Maps CHINA: Chongqing Urban Rural Integration Project

Insert Map IBRD 37535

#### IBRD 37535

