

# Project Administration Manual

Project Number: 45507  
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People's Republic of China: Yunnan Chuxiong Urban  
Environment Improvement Project

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### **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Chuxiong Yi Autonomous Prefecture Government (CPG), the executing agency; Chuxiong Municipal Government (CMG), Lufeng County Government (LCG), and Wuding County Government (WCG), the implementing agencies; Chuxiong Development and Investment Company Ltd. (CDIC), Lufeng Urban Construction and Investment Company Ltd. (LUCIC), Wuding Urban Construction and Investment Company Ltd. (WUCIC), the project implementing units, are wholly responsible for the implementation of the ADB financed project, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by CPG, CMG, LCG, WCG, CDIC, LUCIC, and WUCIC of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

## Abbreviations

ADB	—	Asian Development Bank
ACWF	—	All China Women's Federation
CDIC	—	Chuxiong Development and Investment Co. Ltd.
CMG	—	Chuxiong Municipal Government
CPG	—	Chuxiong Yi Autonomous Prefecture Government
CPMO	—	Chuxiong Municipal project management office
CPPMO	—	Chuxiong Prefecture project management office
DMF	—	design and monitoring framework
EHS	—	environment, health and safety
EIA	—	environment impact assessment
EMP	—	environmental management plan
EPB	—	environment protection bureau
GAP	—	gender action plan
GRM	—	grievance redress mechanism
ICB	—	international competitive bidding
ICS	—	individual consultant selection
LAR	—	land acquisition and resettlement
LCG	—	Lufeng County Government
LIEC	—	loan implementation environment consultant
LUCIC	—	Lufeng Urban Construction, Development and Investment Co. Ltd.
NCB	—	national competitive bidding
O&M	—	operation and maintenance
PIU	—	project implementing unit
PMC	—	project management consultants
PMO	—	project management office
PPCU	—	project public complaints unit
PPMS	—	project performance management system
PRC	—	People's Republic of China
QCBS	—	quality- and cost-based selection
REMDP	—	resettlement and ethnic minority development plan
RRP	—	report and recommendation of the President
SAP	—	social action plan
SCS	—	startup consulting service
SOE	—	statement of expenditures
STI	—	sexually transmitted infection
WCG	—	Wuding County Government
WUCIC	—	Wuding Construction, Development and Investment Co. Ltd.

## **I. PROJECT DESCRIPTION**

### **1. Background and Rationale**

1. Yunnan, one of the 12 less-developed municipality, provinces and autonomous regions targeted under the PRC's Western Development Strategy, is landlocked, mountainous, and hilly. Sharing 4,060 kilometers (km) of border with the Lao People's Democratic Republic, Myanmar and Viet Nam, its location provides it with a particular geographical advantage of emerging as an important national transport and trade gateway for the western inland PRC to connect with the neighboring countries of the GMS. Because of this, Yunnan is endowed with an opportunity to support the PRC's greater geographical balance in social and economic development across the country. Since 2001, it has added 55,099 km of national roads and highways to expand the transportation links within Yunnan as well as with those neighboring GMS countries. Despite its development potential, Yunnan's economy has grown more slowly than those of the other Western inland provinces and autonomous regions. The provincial per capita gross domestic product in 2012 was \$3,505, only 58% of the PRC average of \$6,093. Although the provincial capital of Kunming is strategically located at the junction of three major GMS transport corridors, Yunnan's share in the PRC's trade with the other GMS countries declined steadily from 20% to 16% during 2001–2012.

2. A key constraint on Yunnan's socioeconomic growth and economic integration into the GMS is its low urbanization rate and the poor competitiveness of its second- and third-tier cities. Despite rapid development in the capital city of Kunming, many of the province's small and medium-sized cities suffer from inadequate basic infrastructure and remain isolated economically. Under its 12th five-year plan covering 2011–2015, Yunnan aims to stimulate its socioeconomic growth by developing clusters of cities with a variety of industries and commercial activities to create economic growth poles. Yunnan needs a strong support to develop economically and commercially competitive second- and third-tier cities and their city clusters to transform the regional transport corridors already established through the province's rapid highway expansion program into corridors of economic development.

3. The three project cities are key centers of the Chuxiong Yi autonomous prefecture, which lies 165 km west of Kunming. The prefecture is especially important to government efforts to (i) strengthen socioeconomic links between Kunming and the surrounding small and medium-sized cities and thereby enhance the overall economic competitiveness of the central Yunnan city cluster, and (ii) promote regional economic cooperation between Yunnan and the other GMS countries, since the prefecture is a western gateway to Myanmar. However, urban expansion has been limited in the three cities by their predominantly hilly and mountainous terrain. Like other small and medium-sized centers in the province, living conditions and their business and investment environments have been degraded by inadequate flood management and poor sanitation services. Their weak urban infrastructure is holding back not only socioeconomic development for their residents but also wider regional economic integration across the province.

4. The Yunnan Chuxiong Urban Environment Improvement Project will provide Asian Development Bank (ADB) lending for second- and third-tier city development of the province through various new approaches. It will include measures to address the frequent flooding in three cities and their surrounding agricultural lands that currently restricts their city expansion and economic development. Although the PRC generally relies heavily on engineering measures to contain flooding, the project will adopt an ecologically sound, climate resilient design that will balance engineering measures with river ecosystem conservation and the enhancement of public amenities. Based on international good practice, it will also introduce the use of storm water

detention ponds in Yunnan to mitigate downstream impacts and pollution from storm water runoff. The poor sanitation in the project cities results from their inability to handle the growing amounts of solid waste and their inadequate sewage pipeline networks. The project will help each city develop comprehensive solid waste management plans and will raise public awareness of the need to reduce, reuse, and recycle waste. The project will also demonstrate how construction of city roads with added functions of harvesting rainwater and intercepting sewage from surrounding villages can improve the urban environment. The roads will also be equipped with energy-saving streetlights. The project will strongly encourage the public to participate in river landscaping and city planning to reflect public priorities as such public participation is still practiced less in the PRC compared to other developed countries.

5. The project is in line with ADB's country partnership strategy, 2011–2015 for the PRC. It aligns with ADB's water operational plan by incorporating socially inclusive and integrated water resource management principles. It is also in line with the aims of ADB's urban operational plan to enhance the competitiveness and livability of cities through urban development. By promoting sustainable urbanization and a better balance in the currently uneven growth and development of the PRC's regions, the project also supports the PRC's 12th Five-Year Plan, 2011–2015 for national economic and social development, as well as related provincial, prefecture, and municipal plans. The project will contribute to Yunnan's sustainable development strategy for 2008–2020, particularly its goal of promoting urban environmental management and expanding environmental infrastructure.

6. ADB has previous experience in water supply, highway, railway, and urban and rural road projects in Yunnan. Project preparation has incorporated lessons from these projects, including the need for (i) sound institutional arrangements, (ii) strong project management support during project start-up, and (iii) comprehensive capacity building on ADB policies, guidelines, and procedures for procurement and contract management.

## **2. Impact and Outcome**

7. The impact will be more competitive, green, and inclusive city development in Chuxiong Municipality, Lufeng County, and Wuding County that will support the development of the Kunming central city cluster. The outcome will be the improvement of the urban infrastructure and the environment in cities of Chuxiong Municipality, Lufeng County, and Wuding County.

## **3. Outputs**

8. The project will generate outputs from three investment subprojects and one capacity development and institutional strengthening component.

- (i) **Chuxiong urban infrastructure and environment improvement.** Outputs comprise: (a) 9.4 kilometers (km) of Longchuan River river flood protection and enhancement with improved 6.2-km river embankments, 202,505 square meters (m<sup>2</sup>) landscaping, and installation of flood early warning system including a coordination center, 2 water/rainfall monitoring stations, 19 real-time monitoring cameras, and 4 flood warning broadcasting stations; (b) 9.0-km urban roads with non-motorized traffic lanes, pedestrian and bicycle facilities; (c) 19.0-km of water supply pipeline, 18.8-km of sewerage pipeline with 29 sewage interceptor facilities, 19.2-km of storm water pipeline, 9.0-km power supply, telecommunication cable networks and 2 street light maintenance vehicles; (d) installation of an integrated traffic control and traffic management system comprising traffic signal with traffic

control system and monitoring camera; and (e) 8 garbage compressing vehicles, 14 garbage collection vehicles, 2,500 trash bins, 2,900 garbage containers, 1 construction waste recycling machine, 6 street sweeping vehicles, 2 high pressure street cleaning vehicles, 2 water spraying vehicles, 4 sewage collection vehicles, and 10 portable toilets.

- (ii) **Lufeng urban infrastructure and environment improvement.** Outputs comprise: (a) 2.0-km East and 4.1-km West river enhancement and flood protection with 12.2-km of river embankment protection, 290,336 m<sup>2</sup> of landscaping and installation of flood early warning system including a coordination center, 3 water/rainfall monitoring stations, 10 real-time monitoring cameras, and 3 flood warning stations; (b) a storm water detention pond system with volume capacity of 68,135 cubic meters; (c) 7.5-km urban roads with non-motorized traffic lanes, pedestrian and bicycle facilities; (d) 15.9-km of water supply pipeline, 15.5-km of sewerage pipeline with 4 sewage interceptor facilities, 18.6 km of storm water pipeline, 7.5-km of power and telecommunication cable networks; and (e) 4 garbage compactor trucks, 10 garbage collection vehicles, 1 construction waste recycling machine, 10 street sweeping/dust collection vehicles, 1 high pressure street cleaning vehicles, 2 water spraying vehicle, and 2 sewage collection vehicles.
- (iii) **Wuding urban infrastructure and environment improvement.** Outputs comprise: (a) 2.6-km of Wulong river flood protection and enhancement through 5.2 km of river embankment protection, 54,572 m<sup>2</sup> of landscaping and installation of the flood early warning system including a coordination center, 7 water/rainfall monitoring stations, 10 real-time monitoring cameras, and 3 flood warning broadcasting stations; (b) a storm water detention pond with volume capacity of 16,884 cubic meters; (c) 9.4-km urban roads with non-motorized traffic lanes, pedestrian and bicycle facilities, and 1 street light maintenance vehicle; (d) 17.9-km of water supply pipeline, 13.4-km of sewerage pipeline with 10 sewage interceptor facilities, 20.3-km of storm water pipeline, 9.4-km of power and telecommunication cables networks; and (e) 3 garbage compactor trucks, 4 mini garbage collection & transport vehicles, 1 street sweeping/dust collection vehicle, 1 movable toilet, and 198 garbage containers.
- (iv) **Capacity development and institutional strengthening.** Outputs comprise: (a) capacity building and institutional strengthening for the project management; (b) expert support and advice on storm water management, municipal solid waste planning and management, urban transport management, and road safety; (c) public awareness activities including road safety and solid waste recycling; and (d) training, seminars, workshops, and study tours on operation and maintenance, public financial management, and public participation and awareness raising activities.



## II. IMPLEMENTATION PLAN

### A. Project Readiness Activities

Indicative Activities	2013							2014						Who is responsible
	6	7	8	9	10	11	12	1	2	3	4	5	6	
Establish project implementation arrangements														CPG, CMG, LCG, WCG, PIUs
Advance contracting actions														CPG, CMG, LCG, WCG
Retroactive financing														CPG, CMG, LCG, WCG
Prepare FCUP														CPG, YDRC
Prepare PEOR														CPG, YFD
Review and approval of FCUP and PEOR														MOF, NDRC
State Council approval for loan negotiations														MOF, State Council
Loan Negotiations														ADB, MOF, YFD, CPG
ADB Board approval														ADB
Loan signing														ADB, MOF
Government legal opinion provided														MOF, MOFA, YDRC, YFD, CPG
Loan effectiveness														ADB, MOF

ADB = Asian Development Bank, CMG = Chuxiong Municipal Government, CPG = Chuxiong Yi Autonomous Prefecture Government, LCG = Lufeng County Government, FCUP = Foreign Capital Utilization Report, MOF = Ministry of Finance, MOFA = Ministry of Foreign Affairs, NDRC = National Development and Reform Commission, PEOR = Project Evaluation Opinion Report, PIUs = project implementing units, WCG = Wuding County Government, YDRC = Yunnan Development and Reform Commission, YFD = Yunnan Provincial Finance Department.

## B. Overall Project Implementation Plan

Overall Project Implementation Plan														
Tasks	2013		2014		2015		2016		2017		2018			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>1. Chuxiong urban infrastructure and environment improvement</b>														
1.1	Detailed design and update of resettlement plan													
1.2	Land acquisition and resettlement													
1.3	Bidding and contract award													
1.4	Purchase of solid waste equipment													
1.5	Dike construction													
1.6	Road construction													
1.7	Landscaping and slope protection works													
<b>2. Lufeng urban infrastructure and environment improvement</b>														
2.1	Detailed design and update of resettlement plan													
2.2	Land acquisition and resettlement													
2.3	Bidding and contract award													
2.4	Purchase of solid waste equipment													
2.5	Dike construction													
2.6	Storm water detention pond construction													
2.7	Road construction													
2.8	Landscaping and slope protection works													
<b>3. Wuding urban infrastructure and environment improvement</b>														
3.1	Detailed design and update of REMDP													
3.2	Land acquisition and resettlement													
3.3	Bidding and contract award													
3.4	Purchase of solid waste equipment													
3.5	Dike construction													
3.6	Storm water detention pond construction													
3.7	Road construction													
3.8	Landscaping and slope protection works													
<b>4. Capacity development and institutional strengthening</b>														
4.1	Recruit and mobilize project startup consultants													
4.2	Recruit and mobilize project implementation consultant													
4.3	Organization arrangement set up													
4.4	Establish and refine PPMS for CPG and implementing agencies													
4.5	Finalize institutional coordination monitoring													
4.6	Implementation of capacity building training													
4.7	Implementation and monitoring of EMP, resettlement plans, REMDP, GAP, and SAP (until Q2 2019)													

CPG = Chuxiong Yi Autonomous Prefecture Government, EMP = environmental management plan, GAP = gender action plan, PPMS = project performance management system, Q = quarter, REMDP = resettlement and ethnic minority development plan, SAP = social action plan.

### III. PROJECT MANAGEMENT ARRANGEMENT

#### A. Project Implementation Organization – Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
Yunnan Provincial Department of Finance	<ul style="list-style-type: none"> <li>• Provide overall project guidance and coordination</li> <li>• Manage the project imprest account</li> <li>• Submit withdrawal applications to ADB</li> </ul>
Executing agency	
Chuxiong Yi Autonomous Prefecture Government	Responsible for project coordination with three project municipal and county governments and liaison with ADB financial management and administration
Chuxiong Prefecture Project Leading Group	Responsible for implementation of the entire project <ul style="list-style-type: none"> <li>• Headed by the prefecture governor and consists of DRC, EPB, FB, HCB, LRB, TB, UB, and WRB</li> <li>• Coordinate and oversee project preparation and implementation</li> <li>• Provide policy guidance during implementation</li> <li>• Facilitate interagency coordination and coordination</li> </ul>
Chuxiong Prefecture Project Management Office	Responsible for entire project implementation <ul style="list-style-type: none"> <li>• In-charge of all day-to-day management work during project preparation and implementation period</li> <li>• Coordinate with all involved parties and government agencies for the project implementation</li> <li>• Communicate and coordinate with ADB for project management and implementation</li> <li>• Report project implementation progress and compliance monitoring to ADB</li> <li>• Engage project management consulting service</li> <li>• Engage external environment, and resettlement and social monitors</li> <li>• On behalf of the implementation agencies and 3 PIUs, submit bidding documents, bid evaluation reports and other necessary documentations to ADB for necessary approval</li> <li>• Submit withdrawal applications to Yunnan Provincial Finance Department</li> <li>• Submit required annual audit reports and financial statements of project account of the Chuxiong Yi Autonomous Prefecture Government, Chuxiong Municipal Government, Lufeng County Government, Wuding County Government, and PIUs to ADB</li> <li>• Engage a design institute to complete preliminary and detailed engineering designs</li> <li>• Engage a procurement agency which supports the implementation agencies and 3 PIUs</li> <li>• Engage project startup consultants and a project management and capacity development consulting service</li> </ul>
Implementing agency for Chuxiong urban infrastructure and environment improvement	
Chuxiong Municipal Government	Responsible for project implementation of Chuxiong urban infrastructure and environment improvement, including finance

<b>Project implementation organizations</b>	<b>Management Roles and Responsibilities</b>
Chuxiong Municipal Project Leading Group	<p>and administration, technical and procurement matters, monitoring and evaluation, and safeguard compliance</p> <p>Responsible for Chuxiong subproject</p> <ul style="list-style-type: none"> <li>• Headed by the mayor and consists of DRC, EPB, FB, HCB, LRB, TB, UB, and WRB</li> <li>• Coordinate and oversee project preparation and implementation</li> </ul>
Chuxiong Municipal Project Management Office	<ul style="list-style-type: none"> <li>• Provide policy guidance during implementation</li> <li>• Facilitate interagency coordination and coordination</li> </ul> <p>Responsible for Chuxiong subproject</p> <ul style="list-style-type: none"> <li>• In-charge of all day-to-day management work during the project preparation and implementation period</li> <li>• Coordinate with all involved parties and government agencies for the project implementation</li> <li>• Communicate and coordinate with ADB Chuxiong Prefecture Project Management Office for project management and implementation</li> <li>• Engage an external environment monitor and a resettlement and social monitor</li> </ul>
<b>Implementing agency for Lufeng urban infrastructure and environment improvement</b>	
Lufeng County Government	<p>Responsible for project implementation for Lufeng urban infrastructure and environment improvement, including finance and administration, technical and procurement matters, monitoring and evaluation, and safeguard compliance</p>
Lufeng County Project Leading Group	<p>Responsible for Lufeng subproject</p> <ul style="list-style-type: none"> <li>• Headed by the vice commissioner and consists of DRC, EPB, FB, HCB, LRB, TB, UB, and WRB</li> <li>• Coordinate and oversee project preparation and implementation</li> <li>• Provide policy guidance during implementation</li> <li>• Facilitate interagency coordination and coordination</li> </ul>
Lufeng Project Management Office	<p>Responsible for Lufeng subproject</p> <ul style="list-style-type: none"> <li>• In-charge of all day-to-day management work during the project preparation and implementation period</li> <li>• Coordinate with all involved parties and government agencies for the project implementation</li> <li>• Communicate and coordinate with ADB Chuxiong Prefecture Project Management Office for project management and implementation</li> <li>• Engage an external environment monitor and a resettlement and social monitor</li> </ul>
<b>Implementing agency for Wuding urban infrastructure and environment improvement</b>	
Wuding County Government	<p>Responsible for project implementation for Wuding urban infrastructure and environment improvement, including finance and administration, technical and procurement matters, monitoring and evaluation, and safeguard compliance</p>

<b>Project implementation organizations</b>		<b>Management Roles and Responsibilities</b>
Wuding County Project Leading Group		Responsible for Wuding subproject <ul style="list-style-type: none"> <li>• Headed by the vice commissioner and consists of DRC, EPB, FB, HCB, LRB, TB, UB, and WRB</li> <li>• Coordinate and oversee project preparation and implementation</li> <li>• Provide policy guidance during implementation</li> <li>• Facilitate interagency coordination and coordination</li> </ul>
Wuding Project Management Office		Responsible for Wuding subproject <ul style="list-style-type: none"> <li>• In-charge of all day-to-day management work during the project preparation and implementation period</li> <li>• Coordinate with all involved parties and government agencies for the project implementation</li> <li>• Communicate and coordinate with ADB Chuxiong Prefecture Project Management Office for project management and implementation</li> <li>• Engage an external environment monitor and a resettlement and social monitor</li> </ul>
<b>Project implementing units</b>		
Chuxiong Development and Investment Co. Ltd.		Implement Chuxiong urban infrastructure and environment improvement subproject on behalf of Chuxiong Municipal Government <ul style="list-style-type: none"> <li>• Engage contractors and procure equipment with assistance of the international tendering agency</li> <li>• Administer and monitor contractors and suppliers</li> <li>• Supervise construction and quality control</li> <li>• Report to Chuxiong Municipal Government</li> </ul>
Lufeng Urban Construction, Development and Investment Co. Ltd.		Implement Lufeng urban infrastructure and environment improvement subproject on behalf of Lufeng County Government <ul style="list-style-type: none"> <li>• Engage contractors and procure equipment with assistance of the international tendering agency</li> <li>• Administer and monitor contractors and suppliers</li> <li>• Supervise construction and quality control</li> <li>• Report to Lufeng County Government</li> </ul>
Wuding Urban Construction, Development and Investment Co. Ltd		Implement Wuding urban infrastructure and environment improvement subproject on behalf of Wuding County Government <ul style="list-style-type: none"> <li>• Engage contractors and procure equipment with assistance of the international tendering agency</li> <li>• Administer and monitor contractors and suppliers</li> <li>• Supervise construction and quality control</li> <li>• Report to Wuding County Government</li> </ul>
<b>ADB</b>		Responsible for administering ADB-funded components of the project

ADB = Asian Development Bank, DRC = Development and Reform Commission, EPB = Environmental Protection Bureau, FB = Finance Bureau, HCB = Housing and Construction Bureau, LRB = Land Resources Bureau, PIUs = project implementing units, TB = Transport Bureau, UB = Urban Management Bureau, WRB = Water Resources Bureau.

## B. Key Persons Involved in Implementation

### Provincial Government

Yunnan Provincial Finance Department	Officer's Name:	Cheng Yujie
	Position:	Deputy Director, International Cooperation Division
	Telephone(Fax):	+86 0871 3631 025
	Email Address:	ynswc@126.com
Yunnan Provincial Guiding Office	Office Address:	Yunnan Provincial Finance Department Wuhuashan, Kunming City
	Officer's Name:	Li Jiangping
	Position:	Director
	Telephone:	+86 0871 6410 2061
	Fax:	+86 0871 6415 8238
	Email Address:	lipyepo@163.com
	Office Address:	No.27, Xiyuannan Road, Xishan District Kunming City

### Executing Agency

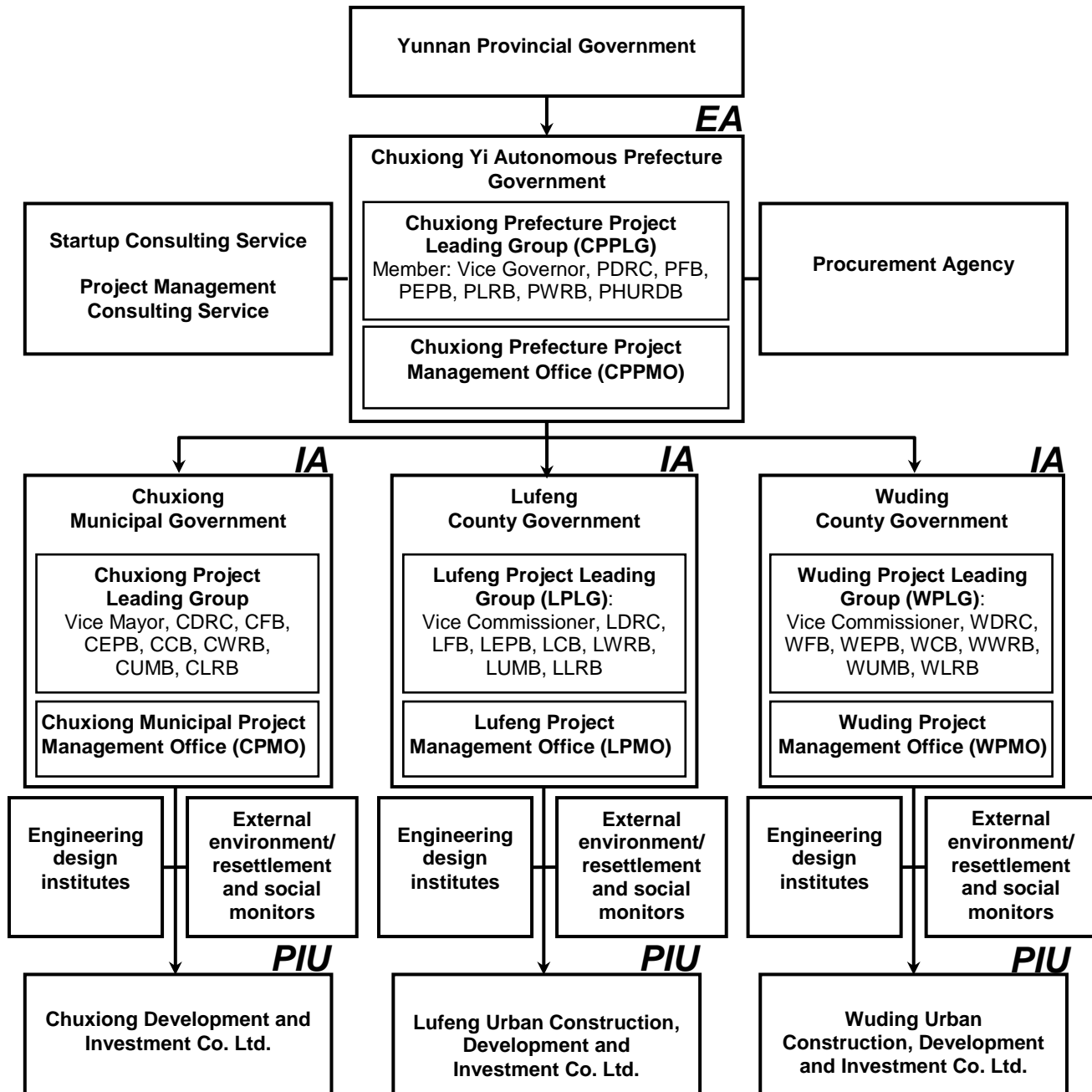
Chuxiong Yi Autonomous Prefecture Government	Officer's Name:	Yang Zhaohui
	Position:	Deputy Governor
	Telephone(Fax):	+86 0878 3389 893
	Email Address:	yncxgyc@163.com
	Office Address:	Chuxiong Yi Autonomous Prefecture Government No. 667, Fengwang Road, Chuxiong Municipality
	Officer's Name:	Zhao Xiaoming
	Position:	Director, Project Management Office
	Telephone:	+86 1390 8789 337
	Email Address:	cxwz8117@126.com
	Office Address:	Chuxiong Yi Autonomous Prefecture Government No.91, Huidong Road, Chuxiong Municipality

### Implementing Agencies

Chuxiong Municipal Government	Officer's Name:	Li Yuan
	Position:	Deputy Governor
	Telephone:	+86 1398 7079 693
	Email Address:	1503529932@qq.com
	Office Address:	Chuxiong Municipal Government No.72, Weichu Road, Chuxiong Municipality
Lufeng County Government	Officer's Name:	Li Chunping
	Position:	Vice Commander of Lufeng Project Management Office
	Telephone:	+86 1350 8784 619
	Email Address:	lfyhb001@163.com
	Office Address:	4 <sup>th</sup> Floor of the Old Court House, Longcheng Road, Lufeng County

Lufeng County Government	Officer's Name: Wang Shaobin Position: Director, Project Management Office Telephone: +86 1398 7886 607 Email Address: lfyhb001@163.com Office Address: 4 <sup>th</sup> Floor of the Old Court House, Longcheng Road, Lufeng County
Wuding County Government	Officer's Name: Zhou Zhiyuan Position: Governor Telephone: +86 1398 7820 138 Email Address: 77575424@qq.com Office Address: No.1, Zhongshan Road, Wuding County
	Officer's Name: Zhou Tingzhi Position: Vice Governor Telephone: +86 1398 7820 138 Email Address: 15241507@qq.com Office Address: No.1, Zhongshan Road, Wuding County
<b>Project Implementing Units</b>	
Chuxiong Development and Investment Co. Ltd.	Officer's Name: Li Jun Position: General Manager Telephone: +86 1390 8785 156 Email Address: 122043863@qq.com Office Address: No.72, Weichu Road, Chuxiong Municipality
Lufeng Urban Construction, Development and Investment Co. Ltd.	Officer's Name: Cao Yuning Position: General Manager Telephone: +86 0878 4130 908, +86 1357 8451 003 +86 1544 567 196 Office Address: 5 <sup>th</sup> Floor of the Art Center, Jinyuan Street, Jinshan Town, Lufeng County
Wuding Urban Construction, Development and Investment Co. Ltd.	Officer's Name: Zhu Jianquan Position: General Manager Telephone: +86 1336 8783 809 Email Address: 964966027@qq.com Office Address: No.1, Zhongshan Road, Wuding County
<b>Asian Development Bank</b>	
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	Staff Name: Mr. Satoshi Ishii Position: Urban Development Specialist Telephone No.: +63 2 632 6929 Email Address: sishii@adb.org

### C. Project Organization Structure



CCB = Chuxiong Construction Bureau, CDRC = Chuxiong Development and Resources Bureau, CEPB = Chuxiong Environment Protection Bureau, CFB = Chuxiong Finance Bureau, CLRB = Chuxiong Land Resources Bureau, CUMB = Chuxiong Urban Management Bureau, CWRB = Chuxiong Water Resources Bureau, LCB = Lufeng Construction Bureau, LDRC = Lufeng Development and Reform Commission, LEPB = Lufeng Environment Protection Bureau, LFB = Lufeng Finance Bureau, LLRB = Lufeng Land Resources Bureau, LUMB = Lufeng Urban Management Bureau, LWRB = Lufeng Water Resources Bureau, PDRC = Provincial Development and Reform Commission, PEPB = Provincial Environment Protection Bureau, PFB = Provincial Finance Bureau, PHURDB = Provincial Housing Urban-Rural Development Bureau, PLRB = Provincial Land Resources Bureau, PWRB = Provincial Water Resources Bureau, WCB = Wuding Construction Bureau, WDRC = Wuding Development Resources Bureau, WEPB = Wuding Environment Protection Bureau, WFB = Wuding Finance Bureau, WLRB = Wuding Land Resources Bureau, WPMO = Wuding Project Management Office, WUMB = Wuding Urban Management Bureau, WWRB = Wuding Water Resources Bureau.



#### IV. COST AND FINANCING

1. The project is estimated to cost \$410.4 million (Table 1). Loan proceeds will be disbursed according to the *Loan Disbursement Handbook* (2012, as amended from time to time) of the Asian Development Bank (ADB), and subject to the provisions of the Loan Agreement.

**Table 1: Project Investment Plan**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Costs<sup>b</sup></b>	
1. Chuxiong urban infrastructure and environment improvement	122.6
2. Lufeng urban infrastructure and environment improvement	144.2
3. Wuding urban infrastructure and environment improvement	84.7
4. Capacity development and institutional strengthening	2.0
<b>Subtotal (A)</b>	<b>353.5</b>
<b>B. Contingencies<sup>c</sup></b>	
<b>Subtotal (B)</b>	<b>42.2</b>
<b>C. Financing Charges during Implementation<sup>d</sup></b>	<b>14.7</b>
<b>Total Project Cost (A+B+C)</b>	<b>410.4</b>

<sup>a</sup> Includes taxes and duties of \$12.2 million to be financed from government and Asian Development Bank (ADB) loan resources.

<sup>b</sup> In mid-2013 prices.

<sup>c</sup> Physical contingencies computed at 8% for civil works, field research and development, training, surveys, and studies. Price contingencies computed at 1.9% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. Excluding contingencies for the land acquisition and resettlement cost which is already included in the base cost

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year US dollar fixed swap rate plus a spread of 0.40% and a maturity premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the domestic bank loan has been computed at the domestic rate of 8.8%.

Source: Asian Development Bank estimates.

2. The government has requested a loan of \$150.0 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term including a grace period of 6 years, an annual interest rate determined in accordance with ADB's London interbank offered rate-based lending facility,<sup>1</sup> a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements. The ADB loan will also finance taxes and duties for eligible ADB-financed expenditures, and transportation and insurance costs included in the base cost for ensuring smooth project implementation. The loan will finance 36.5% of the project cost, including civil works, equipment and materials, and institutional strengthening. The government will finance the remaining \$175.7 million through counterpart funds from three project city and county governments, and the remaining \$84.7 million will be financed by local domestic banks (Table 2).

3. The Government of the People's Republic of China is the borrower of the loan and will make the loan available, through the Yunnan Provincial Government and Chuxiong Yi Autonomous Prefecture Government, to the project municipal and county governments on the same terms and conditions as those of the ADB loan. The project municipal and county governments will assume the foreign exchange and interest variation risks of the ADB loan. The People's Republic of China, Yunnan Provincial Government, Chuxiong Yi Autonomous Prefecture Government, and project municipal and county governments have assured ADB that counterpart funding will be provided in

<sup>1</sup> The government has requested that repayment will follow the 10% annuity repayment option. The interest includes a maturity premium of 20 basis points based on the selected loan terms.

a timely manner, including any additional counterpart funding required for any shortfall of funds or cost overruns.

**Table 2: Indicative Financing Plan**

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank		
Ordinary capital resources	150.0	36.5
Chuxiong Municipal Government	57.2	14.0
Lufeng County Government	81.9	20.0
Wuding County Government	36.6	8.9
Domestic Banks	84.7	20.6
<b>Total</b>	<b>410.4</b>	<b>100.0</b>

Source: Asian Development Bank estimates.

### D. Detailed Cost Estimate by Expenditure Category

Item	(CNY million)			(\$ million)			% of Total Base Cost
	Foreign Exchange	Local Currency	Total Cost <sup>a</sup>	Foreign Exchange	Local Currency	Total Cost	
<b>A. Investment Cost<sup>b</sup></b>							
1. Civil works	209.7	838.8	1,048.5	34.4	137.5	171.9	48.6
2. Mechanical and equipment	17.4	69.6	87.0	2.9	11.4	14.3	4.0
3. Land acquisition and resettlement	0.0	871.1	871.1	0.0	142.8	142.8	40.4
4. Survey, design, and supervision	32.0	105.6	137.6	5.3	17.3	22.6	6.4
5. Consultants							
a. Project management	8.5	0.0	8.5	1.4	0.0	1.4	0.4
b. Capacity development	3.7	0.0	3.7	0.6	0.0	0.6	0.2
<b>Subtotal (A)</b>	<b>271.3</b>	<b>1,885.0</b>	<b>2,156.3</b>	<b>44.5</b>	<b>309.0</b>	<b>353.5</b>	<b>100.0</b>
<b>B. Contingencies<sup>c</sup></b>							
1. Physical	20.6	82.3	102.8	3.4	13.5	16.9	4.8
2. Price	30.9	123.8	154.7	5.1	20.3	25.4	7.2
<b>Subtotal (B)</b>	<b>51.5</b>	<b>206.0</b>	<b>257.5</b>	<b>8.4</b>	<b>33.8</b>	<b>42.2</b>	<b>11.9</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>							
1. Interest	11.3	76.5	87.7	1.9	12.5	14.4	4.1
2. Commitment charges	2.1	0.0	2.1	0.3	0.0	0.3	0.1
<b>Subtotal (C)</b>	<b>13.4</b>	<b>76.5</b>	<b>89.8</b>	<b>2.2</b>	<b>12.5</b>	<b>14.7</b>	<b>4.2</b>
<b>Total Project Cost (A+B+C)</b>	<b>336.2</b>	<b>2,167.5</b>	<b>2,503.6</b>	<b>55.1</b>	<b>355.3</b>	<b>410.4</b>	<b>116.1</b>

<sup>a</sup> Includes taxes and duties of \$12.2 million to be financed from government and Asian Development Bank (ADB) loan resources.

<sup>b</sup> In mid-2013 prices.

<sup>c</sup> Physical contingencies computed at 8% for civil works, field research and development, training, surveys, and studies. Price contingencies computed at 1.9% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. Excluding contingencies for the land acquisition and resettlement cost which is already included in the base cost.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year US dollar fixed swap rate plus a spread of 0.40% and a maturity premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the domestic bank loan has been computed at the domestic rate of 8.8%.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

**E. Allocation and Withdrawal of Loan Proceeds**

<b>Category</b>				<b>ADB Financing</b>
<b>No.</b>	<b>Item</b>	<b>Total Amount Allocated for ADB Financing (\$)</b>		<b>Percentage and Basis for Withdrawal from the Loan Account</b>
		<b>Category</b>	<b>Subcategory</b>	
1	Works	130,714,900		76% of total expenditure
2	Equipment and materials	14,253,500		100% of total expenditure
3	Capacity development and institutional strengthening	2,000,000		100% of total expenditure
4	Interest and commitment charges	3,031,600		100% of amount due
<b>Total</b>		<b>150,000,000</b>		

## F. Detailed Cost Estimate by Financier

(\$ million)<sup>a</sup>

Item	ADB		Chuxiong		Lufeng		Wuding		Domestic Banks	
	% of Cost		% of Cost		% of Cost		% of Cost		% of Cost	
	Amount	Category	Amount	Category	Amount	Category	Amount	Category	Amount	Category
<b>A. Investment Cost<sup>b</sup></b>										
1. Civil works										
a. Chuxiong urban infrastructure and environment improvement	46.0	76.0	14.5	24.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Lufeng urban infrastructure and environment improvement	45.7	76.0	0.0	0.0	7.8	13.0	0.0	0.0	6.6	10.9
c. Wuding urban infrastructure and environment improvement	39.1	76.0	0.0	0.0	0.0	0.0	5.5	10.7	6.8	13.3
2. Mechanical and equipment										
a. Chuxiong urban infrastructure and environment improvement	9.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Lufeng urban infrastructure and environment improvement	3.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Wuding urban infrastructure and environment improvement	2.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Land acquisition and resettlement	0.0	0.0	34.9	24.1	66.5	46.5	24.5	17.2	17.4	12.2
4. Survey, design, and supervision	0.0	0.0	8.3	37.0	7.6	33.7	6.6	29.4	0.0	0.0
5. Consultants										
a. Project management	1.4	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Capacity development	0.6	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal (A)</b>	<b>147.0</b>	<b>41.6</b>	<b>57.2</b>	<b>16.2</b>	<b>81.9</b>	<b>23.2</b>	<b>36.6</b>	<b>10.4</b>	<b>30.8</b>	<b>8.7</b>
<b>B. Contingencies<sup>c</sup></b>										
1. Physical	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9	100.0
2. Price	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.4	100.0
<b>Subtotal (B)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>42.2</b>	<b>100.0</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>										
1. Interest during construction	2.7	18.7	0.0	0.0	0.0	0.0	0.0	0.0	11.7	81.3
2. Commitment charges	0.3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Subtotal (C)</b>	<b>3.0</b>	<b>20.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>11.7</b>	<b>79.4</b>
<b>Total Project Cost (A+B+C)</b>	<b>150.0</b>	<b>36.5</b>	<b>57.2</b>	<b>13.9</b>	<b>81.9</b>	<b>19.9</b>	<b>36.6</b>	<b>8.9</b>	<b>84.7</b>	<b>20.6</b>
<b>% of Total Project Cost</b>		<b>37</b>		<b>14</b>		<b>20</b>		<b>9</b>		<b>20</b>

<sup>a</sup> Includes taxes and duties of \$12.2 million to be financed from government and Asian Development Bank (ADB) loan resources.

<sup>b</sup> In mid-2013 prices.

<sup>c</sup> Physical contingencies computed at 8% for civil works, field research and development, training, surveys, and studies. Price contingencies computed at 1.9% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. Excluding contingencies for the land acquisition and resettlement cost which is already included in the base cost.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year US dollar fixed swap rate plus a spread of 0.40% and a maturity premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the domestic bank loan has been computed at the domestic rate of 8.8%.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

### G. Detailed Cost Estimate by Outputs

Item	(\$ million) <sup>a</sup>						
	Total Cost	Chuxiong urban infrastructure and environment improvement		Lufeng urban infrastructure and environment improvement		Wuding urban infrastructure and environment improvement	
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
<b>A. Investment Cost<sup>b</sup></b>							
1. Civil works	171.9	60.5	35.2	60.0	34.9	51.4	29.9
2. Mechanical and equipment	14.3	9.1	63.7	3.1	21.6	2.1	14.7
3. Land acquisition and resettlement	142.8	44.7	31.3	73.5	51.5	24.7	17.3
4. Survey, design, and supervision	22.6	8.3	37.0	7.6	33.7	6.6	29.4
5. Consultants							
a. Project management	1.4	0.5	38.0	0.5	33.6	0.4	28.4
b. Capacity development	0.6	0.2	38.0	0.2	33.6	0.2	28.4
<b>Subtotal (A)</b>	<b>353.5</b>	<b>123.3</b>	<b>34.9</b>	<b>144.9</b>	<b>41.0</b>	<b>85.3</b>	<b>24.1</b>
<b>B. Contingencies<sup>c</sup></b>							
1. Physical	16.9	6.3	37.3	5.7	33.9	4.9	28.8
2. Price	25.4	8.9	35.0	10.3	40.6	6.2	24.4
<b>Subtotal (B)</b>	<b>42.2</b>	<b>12.7</b>	<b>33.6</b>	<b>16.0</b>	<b>37.9</b>	<b>9.3</b>	<b>26.2</b>
<b>Financing Charges During Implementation<sup>d</sup></b>							
1. Interest during construction	14.4	2.6	18.4	7.5	52.4	4.2	29.3
2. Commitment charges	0.3	0.1	38.0	0.1	33.6	0.1	28.4
<b>Subtotal (C)</b>	<b>14.7</b>	<b>2.8</b>	<b>18.8</b>	<b>7.6</b>	<b>51.9</b>	<b>4.3</b>	<b>29.2</b>
<b>Total Project Cost (A+B+C)</b>	<b>410.4</b>	<b>141.3</b>	<b>34.4</b>	<b>168.5</b>	<b>41.1</b>	<b>100.6</b>	<b>24.5</b>
<b>% of Total Project Cost</b>			<b>34</b>		<b>41</b>		<b>25</b>

<sup>a</sup> Includes taxes and duties of \$12.2 million to be financed from government and Asian Development Bank (ADB) loan resources.

<sup>b</sup> In mid-2013 prices.

<sup>c</sup> Physical contingencies computed at 8% for civil works, field research and development, training, surveys, and studies. Price contingencies computed at 1.9% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. Excluding contingencies for the land acquisition and resettlement cost which is already included in the base cost.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year US dollar fixed swap rate plus a spread of 0.40% and a maturity premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the domestic bank loan has been computed at the domestic rate of 8.8%.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

**H. Detailed Cost Estimate by Year**  
(\$ million)<sup>a</sup>

Item	Total Cost	2014	2015	2016	2017	2018
<b>A. Investment Cost<sup>b</sup></b>						
1. Civil works	171.9	1.9	14.2	31.2	56.0	68.7
2. Mechanical and equipment	14.3	0.2	1.2	2.6	4.6	5.7
3. Land acquisition and resettlement	142.8	28.6	50.0	35.7	21.4	7.1
4. Survey, design, and supervision	22.6	4.5	7.9	5.6	3.4	1.1
5. Consultants						
a. Project management	1.4	0.0	0.1	0.3	0.5	0.6
b. Capacity development	0.6	0.0	0.0	0.1	0.2	0.2
<b>Subtotal (A)</b>	<b>353.5</b>	<b>35.1</b>	<b>73.4</b>	<b>75.5</b>	<b>86.1</b>	<b>83.4</b>
<b>B. Contingencies<sup>c</sup></b>						
1. Physical	16.9	0.2	1.4	3.1	5.5	6.8
2. Price	25.4	0.3	2.1	4.6	8.3	10.1
<b>Subtotal (B)</b>	<b>42.2</b>	<b>0.5</b>	<b>3.5</b>	<b>7.7</b>	<b>13.8</b>	<b>16.9</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>						
1. Interest during construction	14.4	0.2	1.2	2.6	4.7	5.7
2. Commitment charges	0.3	0.0	0.0	0.1	0.1	0.1
<b>Subtotal (C)</b>	<b>14.7</b>	<b>0.2</b>	<b>1.3</b>	<b>2.7</b>	<b>4.8</b>	<b>5.9</b>
<b>Total Project Cost (A+B+C)</b>	<b>410.3</b>	<b>35.7</b>	<b>78.0</b>	<b>85.9</b>	<b>104.6</b>	<b>106.1</b>
<b>% of Total Project Cost</b>	<b>100</b>	<b>9</b>	<b>19</b>	<b>21</b>	<b>25</b>	<b>26</b>

<sup>a</sup> Includes taxes and duties of \$12.2 million to be financed from government and Asian Development Bank (ADB) loan resources.

<sup>b</sup> In mid-2013 prices.

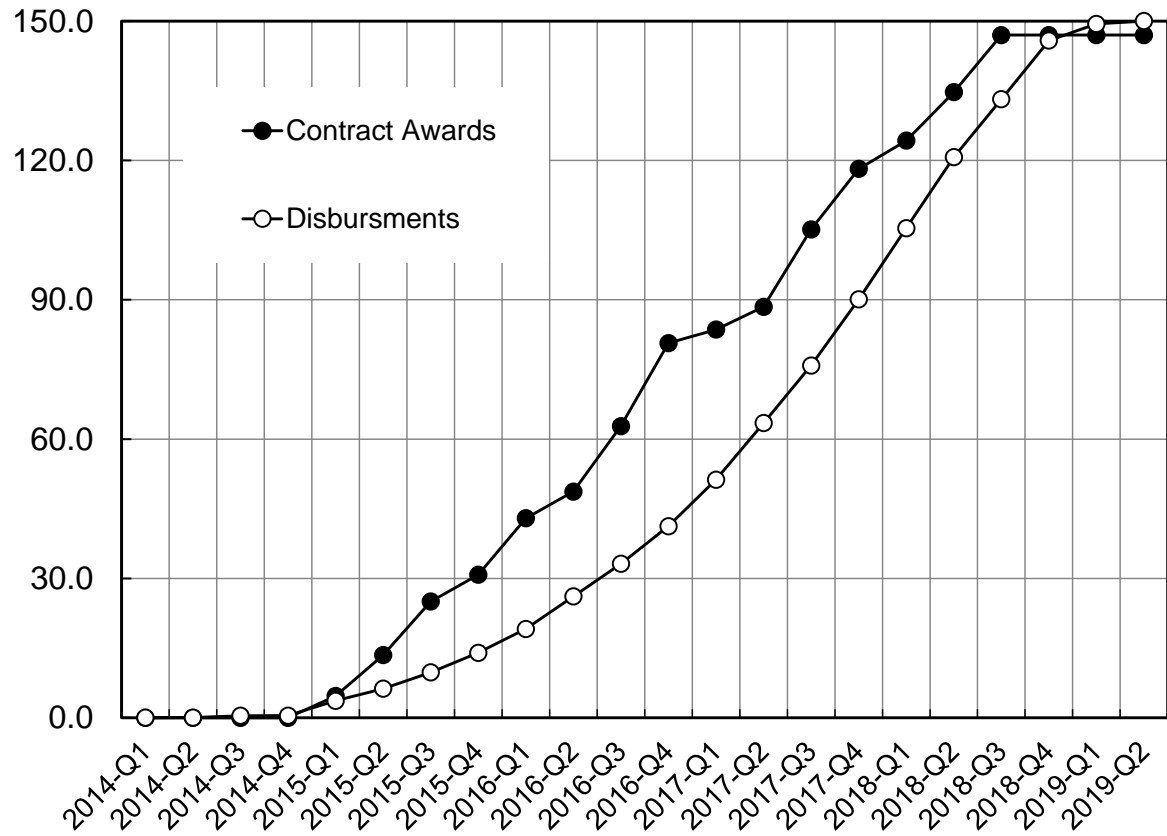
<sup>c</sup> Physical contingencies computed at 8% for civil works, field research and development, training, surveys, and studies. Price contingencies computed at 1.9% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. Excluding contingencies for the land acquisition and resettlement cost which is already included in the base cost.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year US dollar fixed swap rate plus a spread of 0.40% and a maturity premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the domestic bank loan has been computed at the domestic rate of 8.8%.

Note: Numbers may not sum precisely because of rounding.

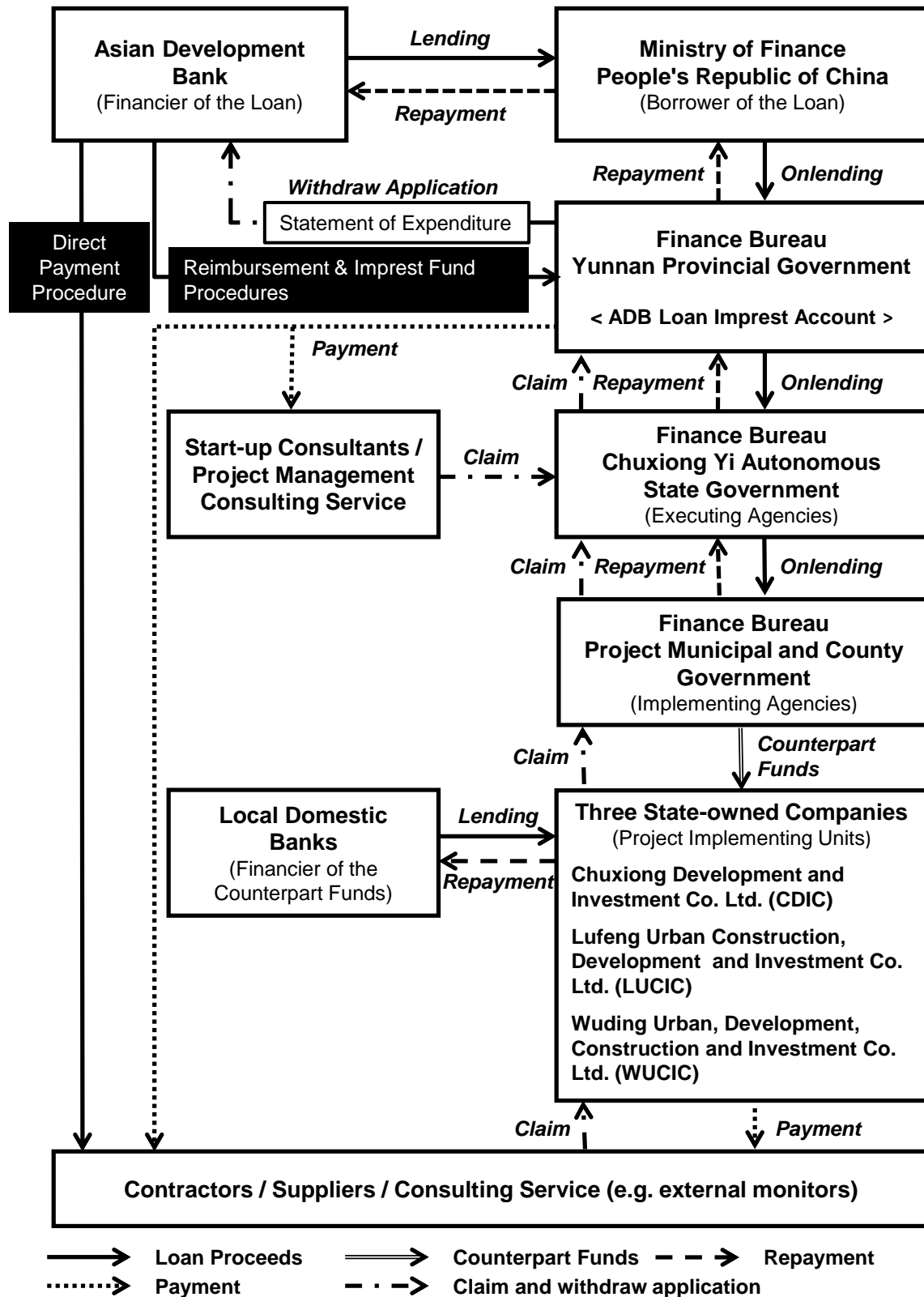
Source: Asian Development Bank estimates.

I. Contract and Disbursement S-Curve						
(\$ million)	2014	2015	2016	2017	2018	2019
Contract Awards	0.0	30.8	49.9	37.0	28.8	0.0
Disbursement	0.5	13.5	27.3	48.9	55.7	4.2





## J. Fund Flow Mechanism



## **V. FINANCIAL MANAGEMENT**

### **A. Financial Management Assessment**

1. The financial management assessment was carried out in accordance with ADB's Guidelines for the *Financial Management and Analysis of Projects*<sup>1</sup> and *Financial Due Diligence: a Methodology Note*,<sup>2</sup> to assess the financial management capacity of the three implementing agencies—Chuxiong Municipal Government, Lufeng County Government, and Wuding County Government; and the three project implementing units—Chuxiong Development and Investment Co. Ltd. (CDIC), Lufeng Urban Construction, Development and Investment Co. Ltd. (LUCIC), and Wuding Urban Construction, Development and Investment Co. Ltd. (WUCIC); including funds-flow arrangements, staffing, accounting policies and procedures, internal and external auditing arrangements, reporting and monitoring, and financial information systems. The assessment concluded that CDIC, LUCIC, and WUCIC are inexperienced in managing ADB projects; hence the project capacity development component will provide comprehensive assistance on ADB policies and procedures, including procurement and disbursement. The overall financial management risk-rating of the project is “medium”. The identified risks in financial management will be closely monitored during project implementation. The assessment indicated that (i) there are established accounting and financial management policies and procedures in the People's Republic of China (PRC), which are strictly followed by CDIC, LUCIC, and WUCIC; and (ii) they have sound accounting and financial management capability and are experienced in managing large projects. However, the implementing agencies, CDIC, LUCIC, and WUCIC have never implemented foreign-funded projects and the managers and financial personnel have limited knowledge and experience of ADB policies and procedures. In addition, it was also found that the implementing agencies (i) have not yet established internal audit functions; and (ii) have limited experience and procedures for managing foreign exchange risks and floating interest rates.

2. It was agreed that the implementing agencies, CDIC, LUCIC, and WUCIC would strengthen their financial management capability to manage the project, including (i) setting up clear institutional arrangements and strengthen coordination mechanism; (ii) completing staff recruitment to fill identified positions; (iii) developing policies and procedures for managing foreign exchange and interest rate risks; (iv) undertaking more training, particularly on ADB policy and procedures and internal auditing system; and (v) seeking external financial management assistance as needed.

### **B. Disbursement**

3. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time), and detailed arrangements agreed upon between the Government and ADB.<sup>3</sup>

4. Pursuant to ADB's Safeguard Policy Statement (2009),<sup>4</sup> ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the ADB Safeguard Policy Statement. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list to subprojects financed by ADB.

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<sup>1</sup> ADB. 2005. *Financial Management and Analysis of Projects*. Manila.

<sup>2</sup> ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila.

<sup>3</sup> Available at: [http://www.adb.org/Documents/Handbooks/Loan\\_Disbursement/loan-disbursement-final.pdf](http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf).

<sup>4</sup> Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

5. The implementing agencies, CDIC, LUCIC, and WUCIC, will be responsible for all disbursement arrangements for each of the subprojects in Chuxiong, Lufeng, and Wuding, including (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB.

6. Direct payment procedure will generally be used for large civil works, equipment contracts, and consulting service contracts. Reimbursement procedures will also be used as appropriate when the government initially funds ADB eligible expenditures from its own resources.

7. To facilitate project implementation and funds flow, the Yunnan Finance Department on behalf of Yunnan Provincial Government (YPG) will, upon loan effectiveness, establish the imprest account at a commercial bank acceptable to ADB. Expenditures not using the imprest account may use other disbursement procedures such as direct payment (to the supplier or contractor), commitment, and reimbursement.

8. The maximum ceiling of the imprest account will not at any time exceed 10% of the loan amount. The currency of the imprest accounts will be the US Dollar. The imprest account is to be used exclusively for ADB's share of eligible expenditures. The YPG, through Yunnan Finance Department, who established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account.<sup>5</sup> The government may request for initial and additional advances to the imprest account based on six months estimated expenditures to be financed through the imprest account. The imprest account will be established, managed, and liquidated in accordance with ADB's *Loan Disbursement Handbook* and detailed arrangements agreed by the Government and ADB. ADB's *Loan Disbursement Handbook* describes which supporting documents should be submitted to ADB and which should be retained by the government for liquidation and replenishment of an imprest account.

9. To expedite funds flow and simplify documentation process, the statement of expenditures (SOE) procedure will be used for liquidation and replenishment of imprest account and reimbursement of eligible expenditures not exceeding \$200,000 per individual payment. Payments in excess of the statement of expenditures procedure ceiling will be reimbursed, liquidated, or replenished based on full supporting documentation process. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.<sup>6</sup>

10. Before the submission of the first withdrawal application, YPG and Chuxiong Yi Autonomous Prefecture Government (CPG) should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000 equivalent, under reimbursement and imprest fund procedures, unless otherwise approved by ADB. Individual payments below this amount should generally be paid from the imprest account, or by the executing agency (or the implementing agency) and subsequently claimed to ADB through reimbursement. ADB reserves the right not to

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<sup>5</sup> The bank charges in the operation of the imprest account may be financed from the loan proceeds.

<sup>6</sup> Checklists for SOE procedures and formats are available at:  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/chap-09.pdf](http://www.adb.org/documents/handbooks/loan_disbursement/chap-09.pdf)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Contracts-100-Below.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-100-Below.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Contracts-Over-100.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-Over-100.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Operating-Costs.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Operating-Costs.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Free-Format.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Free-Format.xls)

accept withdraw applications below the minimum amount. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.

11. For the domestic funds, CMG, LCG, WCG, implementing agencies will allocate the designated funding for the project as specified in the project agreement. Counterpart funds from the government will be disbursed and liquidated by project implementing units (PIUs) to contractors and service providers. The disbursement process will follow this process: (i) project implementing agreements will be mutually signed between each PIU and respective city and county government; (ii) project implementing agreements will become effective; (iii) according to the progress of the contract, PIUs will submit disbursement request to the project management office of the respective city and county governments; and (iv) once approved, counterpart funds will be disbursed from finance bureau of the respective city and county governments.

12. After the project secures all required domestic approvals, the final loan application can be submitted to the domestic banks in each project city and county. The bank will review and evaluate the loan application, and submit to the bank board for approval. Once the application is approved, the bank and the borrower will negotiate and sign the loan agreements. The loan will have a fixed-term period. The interest rate will be based on the standard loan interest rate determined by China People's Bank plus premium. The banks as well as the government auditing agencies will conduct auditing for the loan payments in accordance with loan agreement and PRC regulations.

### **C. Accounting**

13. CPG will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. Consolidated project financial statements will be prepared annually in accordance with the government's accounting laws and regulations, which are consistent with international accounting principles and practices.<sup>7</sup>

### **D. Auditing and Public Disclosure**

14. The YPG and CPG will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and the Government Auditing Standards of the PRC (where these are consistent with International Standards on Auditing), by an auditor acceptable to ADB. The audited project financial statement will be submitted in the English language to ADB within six months of the end of the financial year by the CPG.

15. The annual audit report for the project will include an audit management letter<sup>8</sup> and auditor's opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) use of the imprest fund procedure; and (v) use of the SOE

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<sup>7</sup> Applicable laws, regulations and guidelines include:

- The Accounting Law of the PRC (2000).
- State-owned Construction Enterprise Accounting Control Regulations.
- Capital Construction Financial Control Regulations.
- Accounting Methods for Projects Financed by the World Bank.

<sup>8</sup> A management letter means formal communications from the auditor to the client management in accordance with the International Standard on Auditing 265 (communicating deficiencies in internal control to those charged with governance and management), which is not required to be provided separately as it is equivalent to the Audit Findings and Recommendations prepared by the Project auditor and submitted to ADB.

procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's *Loan Disbursement Handbook* and the project documents.

16. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

17. The Government, YPG, and CPG have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>9</sup> ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

18. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).<sup>10</sup> After review, ADB will disclose the financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

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<sup>9</sup> ADB Policy on delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

<sup>10</sup> Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Advance Contracting and Retroactive Financing

1. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2013, as amended from time to time)<sup>1</sup> and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).<sup>2</sup> Advance contracting and retroactive financing was approved in ADB's management review meeting on 6 November 2013. The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. It was explained to the borrower, the executing agency—Chuxiong Yi Prefecture Autonomous Government (CPG), the implementing agencies—Chuxiong Municipal Government (CMG), Lufeng County Government (LCG), Wuding County Government (WCG), and the project implementing units (PIUs) that: (i) advance contracting includes the advertisement, bidding documents, (not prequalification), evaluation of bids and up to the recommendation of contracts award; and, that all steps will require ADB's no objection; (ii) approval of advance contracting and retroactive financing does not commit ADB to finance the project and (iii) where advance contracting is approved, ADB's approval must be sought for the draft prequalification and bidding documents before they are issued.

2. To expedite project implementation, the Government requested ADB to approve advance contracting, which includes the recruitment of consultants and procurement of civil works; and the request for retroactive financing of eligible expenditures for consulting services, civil works, and equipment procurement.

3. **Advance contracting.** Advance contracting will include (i) prequalification of contractors, tendering, and bid evaluation for civil works contract packages, (ii) awarding of contracts, and (iii) recruitment of consultants. The advance contracting includes three civil work contract packages and two consulting service contracts. The issuance of invitations to bid, the draft prequalification and bidding documents under advance procurement action will be subject to ADB approval.

4. **Retroactive financing.** The Government was informed that as a general rule, retroactive financing is permitted only if (i) it is specifically agreed by ADB and the Borrower; (ii) the goods, works, services, and consultants for which it is requested are procured in accordance with ADB's Procurement Guidelines (2013, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time); (iii) the amount to be retroactively financed does not exceed 20% of the loan amount; and (iv) the expenditures must have been incurred before effectiveness of the relevant loan but, generally, no earlier than 12 months before signing of the Loan Agreement. In either instance, detailed assessments (due diligence) on each retroactive financing proposal must demonstrate that (a) the expenditures incurred are genuine, reasonable, and material to getting the project off the ground; and (b) they were incurred for proper reasons, in a transparent manner over a reasonable period of time. The retroactive financing will include three civil works packages and two consulting service packages in **Table 8**. The Government has been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

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<sup>1</sup> Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

<sup>2</sup> Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

## B. Procurement of Goods, Works and Consulting Services

5. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2013, as amended from time to time). International competitive bidding (ICB) will be used for civil works contracts estimated to cost \$10 million and above. National competitive bidding (NCB) will be used for civil works contracts estimated to cost over \$200,000 equivalent up to \$10 million. For goods and equipment, ICB will be used for values exceeding \$1 million, while NCB will be used for goods and equipment from over \$100,000 to below \$1 million equivalent. For NCB, the first draft English language of the procurement documents (prequalification, bidding documents, and draft contract) should be submitted for ADB approval regardless of the estimated contract amount. Subsequent procurements are subject to post review. All ICB contracts are subject to prior review. Prior review and approval of ADB of the procurement documents (prequalification, bidding, contract) is required.

6. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in **Section C**.

7. All consultants financed by ADB will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).<sup>3</sup> The terms of reference for project implementation consulting service and start-up consulting service are detailed in **Section D**. An estimated 143.5 person-months (26 international, 117.5 national) of consulting services are required to (i) facilitate project management and implementation, (ii) provide capacity building and institutional strengthening, and (iii) required external monitoring.

## C. Procurement Plan

**Table 1: Basic Data**

<b>Project Name:</b> Yunnan Chuxiong Urban Environment Improvement Project	
<b>Country:</b> People's Republic of China	<b>Executing Agency:</b> Chuxiong Yi Autonomous Prefecture Government
<b>Loan Amount:</b> \$150 million	<b>Loan Number:</b> xxxx
<b>Date of First Procurement Plan:</b> 15 January 2013	<b>Date of this Procurement Plan:</b> 11 December 2013

### 1. Process Thresholds, Review and 18-Month Procurement Plan

#### a. Project Procurement Thresholds

8. Except as ADB may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

**Table 2: Procurement of Goods and Works**

Method	Threshold
International competitive bidding (ICB) for works	\$10 million or more
International competitive bidding for goods	\$1 million or more
National competitive bidding (NCB) for works	More than \$200,000 but less than \$10 million
National competitive bidding for goods	More than 100,000 but less than \$1 million
Shopping for works	Below \$200,000
Shopping for goods	Below \$100,000

<sup>3</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

**b. ADB Prior or Post Review**

9. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

**Table 3: ADB Prior or Post Review**

Procurement Method	Prior or Post	Comments
<b>Procurement of Goods and Works</b>		
ICB Works	Prior	
ICB Goods	Prior	
NCB Works	Post <sup>a</sup>	
NCB Goods	Post <sup>a</sup>	
Shopping for Works	Post	
Shopping for Goods	Post	
<b>Recruitment of Consulting Firms</b>		
QCBS	Prior	Quality- cost ratio: 80:20
ICS	Prior	

ICB = international competitive bidding, ICS = individual consultant selection, NCB = national competitive bidding, QCBS = quality- and cost-based selection.

<sup>a</sup> The first batch of national competitive bidding procurement documents in each subproject (e.g., information for bidder, bidding documents, and bid evaluation report) should be submitted for ADB's prior review and approval. The subsequent national competitive bidding procurement documents can be reviewed post project.

Source: Asian Development Bank estimates.

**c. Goods and Works Contracts Estimated to Cost More Than \$1 Million**

10. The following tables list goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

**Table 4: Goods and Works Contracts Estimated to Cost More Than \$1 Million**

Ref. No.	Description	Value of Contracts (\$ million)	Procurement method	Advertisement (quarter/year)	ADB Review
<b>Chuxiong urban infrastructure and environment improvement</b>					
<b>Works</b>					
CCX1	No. 11 road and related infrastructure (2.9 km)	15.2	ICB	Q1/2014	Prior
CCX2	No. 10 road and related infrastructure (1.4 km)	7.5	NCB	Q2/2014	Prior
CCX3	No. 49 road and related infrastructure (1.6 km)	5.0	NCB	Q2/2015	Post
CCX4	No. 17 road Section 1 (No. 9 to no. 11 roads)	8.0	NCB	Q2/2016	Post
CCX5	No. 17 road Section 2 (No. 11 to no. 41 roads)	8.2	NCB	Q3/2017	Post
CCXR1 <sup>a</sup>	Longchuan River rehabilitation Sections 1 and 2	2.0	NCB	Q2/2014	Post
CCXR2	Longchuan River rehabilitation Section 3	7.4	NCB	Q2/2015	Post
CCXR3	Landscaping	7.9	NCB	Q2/2016	Post
<b>Goods</b>					
ECX1	ITS and traffic control	2.9	ICB	Q3/2016	Prior
ECX2	Municipal solid waste equipment (inc. street cleaning vehicles, waste collection vehicles)	5.0	ICB	Q2/2014	Prior
<b>Lufeng urban infrastructure and environment improvement</b>					
<b>Works</b>					
CLF1	Zhuluoji avenue north extension and related infrastructure (1 km)	6.1	NCB	Q1/2014	Prior
CLF2	No. 1 road and Jin Shan Nan road and related infrastructures (3.1 km)	16.0	ICB	Q2/2015	Prior
CLF3	Shji avenue extension and related infrastructure (1 km)	6.4	NCB	Q3/2016	Post
CLF4	No. 2 road and no. 3 road and related infrastructures (2.3 km)	9.8	NCB	Q4/2017	Post
CLF5	Storm water detention pond	4.2	NCB	Q3/2014	Post
CLFR1	West and East river rehabilitation (6.1 km)	8.2	NCB	Q2/2014	Post
CLFR2	Landscaping	9.7	NCB	Q2/2016	Post



Ref. No.	Description	Value of Contracts (\$ million)	Procurement method	Advertisement (quarter/year)	ADB Review
<b>Goods</b>					
ELF1	Municipal solid waste equipment (inc. street cleaning vehicles, waste collection vehicles)	2.3	ICB	Q2/2014	Prior
<b>Wuding urban infrastructure and environment improvement Works</b>					
CWD1	Beicheng road and related infrastructure (1.5 km)	9.0	NCB	Q1/2014	Prior
CWD2	Wuchan and Wuxu roads with related infrastructures (2.2 km)	7.6	NCB	Q1/2015	Post
CWD3	Chengbei road with related infrastructure (1.2 km)	7.5	NCB	Q4/2016	Post
CWD4	Mudan, Caiyuan, Binhe and Wuzheng roads and related infrastructures (4.0 km)	18.5	ICB	Q4/2017	Prior
CWDR1	Wulong river rehabilitation	7.8	NCB	Q1/2014	Post
<b>Goods</b>					
EWD1	Traffic signals and equipment	1.3	ICB	Q2/2015	Prior

ICB = international competitive bidding, ITS = information technology system, NCB = national competitive bidding, Q = quarter.

<sup>a</sup> With provision for community participation in procurement process.

Source: Asian Development Bank estimates.

#### d. Consulting Services Contracts Estimated to Cost More Than \$100,000

11. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

**Table 5: Consulting Services Contracts Estimated to Cost More Than \$100,000**

Ref. No.	General Description	Contract Value (\$ million)	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
CS1	Project management and capacity development	1.8	QCBS (80:20)	Q1/2014	Both	
CS2	Startup consulting service	0.2	ICS	Q4/2013	National	

ICS = individual consultant selection, Q = quarter, QCBS = quality- and cost-based selection.

Source: Asian Development Bank estimates.

#### e. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000

12. The following table groups smaller-value goods, works and consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

**Table 6: Summary Procurement of Small Works and Goods**

Ref. No.	General Description	Value of Contracts (cumulative)	Number of Contracts	Procurement/ Recruitment Method	Comments
<b>Goods</b>					
ECXR1 <sup>a</sup>	Flood warning system	0.43	1	NCB	Q2/2016
ELFR1 <sup>a</sup>	Flood warning system	0.38	1	NCB	Q1/2015
EWD1	Flood warning system	0.37	1	NCB	Q4/2014
EWD2	Municipal solid waste equipment (inc. street cleaning vehicle, waste collection vehicle)	0.54	1	NCB	Q4/2014
EMISC	Equipment (miscellaneous)	0.05	5	Shopping	Q4/2016
<b>Works</b>					
CWD5	Storm water detention pond	1.0	1	NCB	Q3/2014

NCB = national competitive bidding, Q = quarter.

<sup>a</sup> Includes civil works for control room and monitoring support and facilities.

Source: Asian Development Bank estimates.

## 2. Indicative List of Packages Required Under the Project

13. The following table provides an indicative list of all procurement (goods, works and consulting services) over the life of the project. Contracts financed by the Borrower and others should also be indicated, with an appropriate notation in the comments section.

**Table 7: Summary of Contract Packages**

General Description	Estimated Value (cumulative) (\$ million)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable <sup>a</sup>	Comments
Works	49.70	3	ICB	n/a	
	123.20	18	NCB	n/a	
Goods	11.50	4	ICB	n/a	
	1.70	4	NCB	n/a	
	0.05	5	Shopping	n/a	
General Description	Estimated Value (cumulative) (\$ million)	Estimated Number of Contracts	Recruitment Method	Type of Proposal <sup>b</sup>	Comments
Consulting Service					
Project management and capacity building	1.84	1	QCBS	Full	
Startup consultant	0.16	2	ICS		

ICB = international competitive bidding, ICS = individual consultant selection, n/a = not applicable, NCB = national competitive bidding, QCBS = quality- and cost-based selection.

<sup>a</sup> See Procurement Guidelines, Appendix 2.

<sup>b</sup> See PAI 2.02G.

Source: Asian Development Bank estimates.

## 3. Advance Contracting

14. The loan processing is scheduled to be completed in May 2014 prior to the inception mission of the project. Project preparations (such as detailed design, and bidding document preparation) shall be implemented simultaneously with the loan processing activities to enable quicker implementation of the project.

**Table 8: Advance Contracting and Retroactive Financing Plan**

No.	Package	Method of procurement	No. of Contract Packages	Cost Estimation (\$ million)	Proposed Date of Tendering
CS1	Project management and capacity development	QCBS (80:20)	1	1.8	Q1/2014
CS2	Startup consulting service	ICS	2	0.2	Q4/2013
ECX2	Municipal solid waste equipment (inc. street cleaning vehicles, waste collection vehicles)	ICB	1	5.0	Q2/2014
CCX1	No. 11 road	ICB	1	15.2	Q1/2014
CWD1	Beicheng avenue	NCB	1	9.0	Q1/2014

ICS = individual consultant selection, NCB = national competitive bidding, Q = quarter, QCBS = quality- and cost-based selection.

Source: Asian Development Bank estimates.

## 4. Community Participation in Procurement

15. To achieve community-based social objectives of the project, the following table provides an indicative list of contracts suitable for participation of the local community. CPG, CMG, CDIC and ADB will ensure that procurement procedures and specifications, suitably adapted to facilitate

community participation in procurement, will be determined after completion of the detailed engineering design (including, possibly, splitting the contract(s) to create a scope of work suitable for community participation).

**Table 9: Community Participation in Procurement**

No.	Package	Method of procurement	No. of Contract Packages	Cost Estimation (\$ million)	Proposed Date of Tendering
CCXR1	Longchuan River rehabilitation Sections 1 and 2	NCB	1	2.0	Q2/2014

## 5. National Competitive Bidding

16. The Borrower's *Law of Tendering and Bidding of the People's Republic of China* promulgated by Order No. 21 of the President of the People's Republic of China on August 30, 1999, are subject to the following clarifications required for compliance with the Guidelines:

- (i) All invitations to prequalify or to bid shall be advertised in the national press, or official gazette, or a free and open access website in the Borrower's country. Such advertisement shall be made in sufficient time for prospective bidders to obtain prequalification or bidding documents and prepare and submit their responses. In any event, a minimum preparation period of thirty (30) days shall be given. The preparation period shall count (a) from the date of advertisement, or (b) when the documents are available for issue, whichever date is later. The advertisement and the prequalification and bidding documents shall specify the deadline for such submission.
- (ii) Qualification requirements of bidders and the method of evaluating the qualification of each bidder shall be specified in detail in the bidding documents, and in the prequalification documents if the bidding is preceded by a prequalification process.
- (iii) If bidding is preceded by a prequalification process, all bidders that meet the qualification criteria set out in the prequalification document shall be allowed to bid and there shall be no limit on the number of prequalified bidders.
- (iv) All bidders shall be required to provide a performance security in an amount sufficient to protect the Borrower/Project Executing Agency in case of breach of contract by the contractor, and the bidding documents shall specify the required form and amount of such performance security.
- (v) Bidders shall be allowed to submit bids by mail or by hand.
- (vi) All bids shall be opened in public; all bidders shall be afforded an opportunity to be present (either in person or through their representatives) at the time of bid opening, but bidders shall not be required to be present at the bid opening.
- (vii) All bid evaluation criteria shall be disclosed in the bidding documents and quantified in monetary terms or expressed in the form of pass/fail requirements.
- (viii) No bid may be rejected solely on the basis that the bid price falls outside any standard contract estimate, or margin or bracket of average bids established by the

Borrower/Project Executing Agency.

- (ix) Each contract shall be awarded to the lowest evaluated responsive bidder, that is, the bidder who meets the appropriate standards of capability and resources and whose bid has been determined (a) to be substantially responsive to the bidding documents, and (b) to offer the lowest evaluated cost. The winning bidder shall not be required, as a condition of award, to undertake responsibilities for work not stipulated in the bidding documents or otherwise to modify the bid as originally submitted.
- (x) Each contract financed with the proceeds of the Loan shall provide that the suppliers and contractors shall permit ADB, at its request, to inspect their accounts and records relating to the performance of the contract and to have said accounts and records audited by auditors appointed by ADB.
- (xi) Government owned enterprises in the Borrower's country may be permitted to bid if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not a dependent agency of the Borrower/Project Executing Agency.
- (xii) Rebidding shall not be allowed solely because the number of bids is less than three (3).

## **D. Consultant's Inputs and Terms of Reference**

### **1. Introduction**

17. The project will have four consulting services packages to support CPG, as executing agency; three project municipal and county governments, as implementing agencies; and PIUs in project implementation and capacity development. The project management consulting service and startup consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Chuxiong Yi Autonomous Prefecture project management office (CPPMO) on behalf of CPG will be responsible for engaging consultants through QCBS (quality- and cost-based selection) for the project management consulting service, and individual consultant selection (ICS) for the startup consulting service.<sup>4</sup> Two packages for external environment monitor and external resettlement and social monitor will be engaged through the counterpart funds. Under the project, the consulting services will be provided in two areas:

- (i) **Project management and capacity development.** Project management and capacity development will provide project management assistance to CPG, implementing agencies, and PIUs to comply with ADB procedural requirements including: (a) project performance management system (PPMS), (b) procurement of contracts, (c) disbursement and contract management, (d) construction planning, supervision and monitoring, (e) reporting requirements, (f) safeguard management and monitoring, and (g) corporate planning and financial management. The consultants will also provide capacity development support to CPG, three municipal and county governments, and PIUs with: (a) ADB's procedural requirements of

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<sup>4</sup> Terms of reference guidelines available at: [http://www.adb.org/Documents/Manuals/Consulting-Services-Operations-Manual/CSOM.pdf?bcsi\\_scan\\_D4A612CF62FE9576=AORY9a8Nho2ezS9Xss/ligEAAAANNiAA&bcsi\\_scan\\_filename=CSOM.pdf](http://www.adb.org/Documents/Manuals/Consulting-Services-Operations-Manual/CSOM.pdf?bcsi_scan_D4A612CF62FE9576=AORY9a8Nho2ezS9Xss/ligEAAAANNiAA&bcsi_scan_filename=CSOM.pdf).

procurement, disbursement, safeguards and financial management; (b) operation and maintenance (O&M) of project components; (c) capacity development policy studies; and (d) training, organization of study visits and workshops.

- (ii) **External monitors.** Independent entities will be engaged to provide external monitoring and verification of the project's safeguards due diligence activities. The external monitors will provide advice to CPG, implementing agencies, and PIUs to comply with ADB's procedural requirements by: (a) conducting regular and spot monitoring on project's safeguards due diligence related activities; (b) assessing the progress of environment management plan, resettlement/land acquisition, effectiveness of mitigation measures, impacts on ethnic minority population, and identify potential risks and measures to further minimize and mitigate the issues, if necessary; (c) monitoring and reporting the implementation of project activities and designed indicators for ethnic minority and social aspects including gender targets; and (d) providing advice to CPG, local PMOs, and PIUs on corrective actions; and (e) compiling and submitting required semiannual reports and annual evaluation reports to the CPG and ADB.

## **2. Consulting Services for Project Management and Capacity Development**

18. Project management and capacity development consulting service of estimated 26 person-months of international and 86 person-months of national consultants will be engaged by QCBS method with a standard quality:cost ratio of 80:20 with full technical proposal procedure. The outline terms of reference are in the following paragraphs. The consulting firm will assist CPG, implementing agencies, and PIUs to:

### **a. Project management and technical audit**

- (i) set up institutional framework, operational procedure, document filing system, and work plan to guide and facilitate the project implementation;
- (ii) set up PPMS in accordance with ADB's policy requirements, including establishing baseline and operation mechanism for data collection, analysis, and reporting;
- (iii) upgrade and improve the project management information system (MIS) to: (a) ensure efficient and effective information sharing and coordination about the project management (e.g., procurement, disbursement, construction, safeguard compliance); and (b) monitor the project's design and monitoring framework, through the use of the PPMS;
- (iv) conduct design, technical, and environmental and social review and audit, and provide expert comments on engineering detailed design in accordance with the required design codes and standards;
- (v) conduct routine site visits and provide technical inputs to construction planning, supervision, and monitoring for quality control of the subproject construction;
- (vi) provide expert inputs, review and justification for contract variations and prepare necessary documentations (e.g., a due diligence report) in accordance with the government and ADB requirements;
- (vii) review procurement documentations including technical specifications, bill of quantity, bidding documents, bid evaluation procedures, and contract negotiations;
- (viii) conduct contract management during the project implementation, to include monitoring construction progress, preparing quarterly and annual progress report, reviewing and certifying the contractors' claims for payments, coordinating project

implementation among contractors and various stakeholders, and coordinating daily operational tasks;

**b. Financial management**

- (ix) establish an efficient and effective financial management system for the project implementation (e.g., fund disbursement management, withdrawal application review, use of loan proceeds and counterpart funds) in accordance with ADB policy and procedural requirements;
- (x) assist CPPMO and PIUs in preparing financial statements and consolidated financial statements according to relevant project financial covenants, and make necessary arrangement with auditing units to supervise the financial management of PIUs;

**c. Support for compliance with ADB safeguard policy statement and PRC safeguard requirements**

- (xi) review and update the environmental management plan (EMP), resettlement plans for Chuxiong and Lufeng, resettlement and ethnic minority development plan (REMDP) for Wuding, social action plan (SAP), and gender action plan (GAP);
- (xii) help CPPMO and local PMOs establish management supervision mechanisms for implementation, monitoring and reporting of the project safeguards issues based on the relevant ADB documentation (e.g., EMP, GAP, REMDP, resettlement plans, SAP) and provide support for their implementation;
- (xiii) help CPPMO and local PMOs ensure implementation of the GAP and SAP requirements by conducting necessary workshops and focus groups meetings;
- (xiv) conduct compliance monitoring of social and safeguards issues, assist the CPPMO and PIUs to formulate corrective actions where necessary, and help the CPPMO to prepare safeguards and social development section in the quarterly progress report and relevant semiannual safeguards monitoring reports (i.e., environment, and resettlement);
- (xv) assist to establish and manage a project-level grievance redress mechanism (GRM), including assistance to the CPPMO to establish a project public complaint unit, and to provide training for project public complaint members and grievance redress mechanism access points;
- (xvi) assist CPPMO, local PMOs, and other relevant agencies to develop reporting formats and establish mechanisms to prepare and submit the environment safeguards related reports specified in the loan and project agreements;

**d. Institutional strengthening and reporting**

- (xvii) collect all necessary information, edit, draft, and submit on time the reports required under loan and project covenants with quality acceptable to CPG and ADB;
- (xviii) organize and provide training on the skills necessary for construction supervision, project management, implementation of GAP, SAP, and safeguards plans (EMP, REMDP, resettlement plans) for ADB requirements;
- (xix) discuss with CPG and implementing agencies to finalize a training plan, and organize appropriate training according to the plan;
- (xx) coordinate and prepare study tours on: (a) innovative O&M planning and practice of roads, flood risk management and storm water detention ponds, (b) advanced

- municipal solid waste management systems and practices, (c) good practices in road safety, (d) urban transport planning and management, (e) low-carbon and environmentally friendly urban design and planning, (f) flood early warning system and evacuation planning, and (g) other relevant aspects related to the project (e.g., public financial management);
- (xxi) provide training on prevention and control of transmissible diseases and HIV/AIDS, and community disturbance to contractors;
  - (xxii) organize and provide capacity building for CPPMO, local PMOs, and PIU staff with respect to gender and development;

**e. Capacity building support**

- (xxiii) create and refine a plan for public awareness campaigns identified under the EMP, GAP, SAP, and conduct them by making necessary coordination with CPG, implementing agencies, PIUs and relevant local stakeholders;
- (xxiv) conduct critical assessment on the capacity of project facility O&M entities and provide expert opinions and recommendations to strengthen its institutional settings and improve/formulate O&M manuals to ensure the capacity of O&M entities will be further improved before the project completion;
- (xxv) conduct review and audit to assess urban transport plan and road safety in each project city, and draft improvement plans to be adopted by the project city and county governments;
- (xxvi) confirm the detailed design of storm water detention ponds and fully reflect the concept of innovative storm water detention ponds, draft a detailed operation and maintenance manual for Lufeng and Wuding county governments, and conduct capacity building trainings for the operation department staff in Lufeng and Wuding;
- (xxvii) plan, coordinate, and organize a study tour and training plan, and prepare required documents for ADB's approval;

**f. CPG and ADB project administration support**

- (xxviii) prepare basic project information including updated project scope, implementing schedule, contract management, procurement plan, social and safeguards compliance, and PPMS monitoring for ADB's loan administration missions;
- (xxix) support CPG in processing minor and major changes in project scope, including conducting detailed technical and safeguards audits and prepare necessary documentations (e.g., due diligence reports);
- (xxx) conduct a detailed project review by updating project financial status, project cost tables, financing plan, and financial and economic analysis, and prepare for safeguard reviews for ADB's loan midterm review; and
- (xxxi) collect and consolidate all necessary project information, and prepare for project completion report and ADB's project completion mission.

**3. Initial Startup Consulting Service for Project Management and Procurement**

19. Initial project management consultants will be engaged as a national individual consultant through ICS method. Two consultants with a total input of 9 person-months will assist CPG, implementing agencies, and PIUs in initial project implementation before the engagement of project implementation consulting service. The consultant will assist CPG, and the implementing agencies to:

- (i) establish initial project management system including internal procedures of routine data filling and information exchange among CPPMO, local PMOs, and PIUs for procurement, disbursement, financial management including internal auditing, and required reporting on project progress and safeguards;
- (ii) assist in engagement of project management and capacity development consulting service through QCBS method in accordance with ADB guidelines and procedural requirements;
- (iii) collect necessary information for reporting requirement of ADB including, quarterly progress report, and project administration manual update for ADB loan administration missions;
- (iv) plan, coordinate, and organize a study tour and training plan, and prepare required documents for ADB's approval;
- (v) update resettlement plans (for Chuxiong and Lufeng) and REMDP (for Wuding) by revisions arising from census of affected persons, land survey and/or made by detailed engineering design;
- (vi) collect additional information and/or conduct additional consultation, if necessary, to ensure the revised resettlement plans will be in full compliance with ADB safeguard policy; and
- (vii) provide training on project management, procurement and financial management, as appropriate.

#### **4. Consulting Service for External Environmental Monitoring**

20. An external environment monitor will be a firm or institute engaged for the whole duration of project implementation. The consultant and/or institute will be engaged by using the counterpart funds. The external environment monitor will examine and verify the project's environmental performance by:

- (i) conducting independent verification of the project's environmental management performance, including identification of any environment-related implementation issues and EMP compliance issues;
- (ii) reviewing environmental impact monitoring results of the local environmental monitoring stations, and EMP monitoring and progress reports prepared by local PMOs and CPPMO, comparing predicted with actual environmental impacts, assessing the effectiveness of the mitigation measures, and suggesting enhancement measures, as required;
- (iii) providing advice to CPPMO, local PMOs, and PIUs on required corrective actions; and
- (iv) submitting EMP implementation compliance verification reports to CPPMO, local PMOs, PIUs (in Chinese), and ADB (in English) annually during project implementation period.

#### **5. Consulting Service for External Resettlement and Social Monitor**

21. An external resettlement and social monitor will be a firm or institute engaged for the whole duration of project implementation. The consultant and/or an institute will be engaged by using the counterpart funds. The external resettlement and social monitor will examine and verify the project's social and resettlement safeguards performance by:



- (i) conducting baseline survey of affected persons and monitoring to ensure implementation of resettlement plans for Chuxiong and Lufeng, REMDP for Wuding, GAP, and SAP in compliance with ADB's safeguard and other relevant policies;
- (ii) making recommendations to resolve any issues or problems on implementation of the plans (as specified above), and providing advice to the local PMOs and PIUs;
- (iii) checking whether PIUs are paying special attention to vulnerable groups, including women, the poor, and the ethnic minority groups, to assess whether they have participated and fully regained their standard of living; and
- (iv) submitting English and Chinese external resettlement and social monitoring reports to CPG and ADB with quality acceptable to ADB every six months during until the completion of resettlement, ethnic minorities plans, gender and social action plans activities.

## 6. Inputs and Cost of Consulting Services

22. The consulting service inputs for project management and capacity development are summarized below in the following table.

<b>Table 10: Consulting Service Inputs for Project Management and Capacity Development</b>		
<b>Experts inputs</b>	<b>International</b>	<b>National</b>
<b>Project Management Consulting Service</b>		
Team leader/urban engineer–project management	10.0	
Deputy team leader/urban engineer–contract management engineer		30.0
River and flood control specialist	2.0	4.0
Procurement specialist		9.0
Financial management specialist		4.0
Environment specialist	3.0	10.0
Resettlement and social specialist	4.0	
Resettlement specialist		8.0
Social and gender specialist		8.0
Regional development and planning specialist		1.0
Storm water management specialist	3.0	3.0
Municipal solid waste management specialist	2.0	3.0
Transport specialist	2.0	
Transport (safety)		3.0
Transport (traffic management)		3.0
<b>Subtotal</b>	<b>26.0</b>	<b>86.0</b>
<b>Startup Project Management Support</b>		
Procurement and contract management specialist		6.0
Resettlement specialist		3.0
<b>Subtotal</b>		<b>9.0</b>
<b>External Environment Monitor</b>		
Environment specialist(s)		9.0
<b>Subtotal</b>		<b>9.0</b>
<b>Resettlement and Social Monitor</b>		
Resettlement and social specialist(s)		13.5
<b>Subtotal</b>		<b>13.5</b>
<b>Total</b>	<b>26.0</b>	<b>117.5</b>

Source: Asian Development Bank estimates.

**Table 11: Capacity Building Component and Consulting Service Budget**

<b>Item</b>	<b>Amount (\$)</b>
<b>A. Project management and capacity building consultant</b>	
1. Consultants	
a. Remuneration and per diem (inc. fees, international/local travel)	
i. International consultants (26 person-months at \$23,000 per month)	598,000
ii. National consultants (86 person-months at \$6,000)	516,000
2. Capacity development training	
a. Training workshops	200,000
b. Overseas/domestic study visits (provisional sum)	100,000
3. Local transportation (inc. vehicle and expenditures)	30,000
4. Survey and data collection	90,000
5. Office administration and operation (inc. office equipment)	10,000
6. Contingency	300,000
<b>Subtotal</b>	<b>1,844,000</b>
<b>B. Startup project management support</b>	
1. Consultants	
a. Remuneration and per diem (inc. fees, local travel)	
i. National consultants (9 person-months at \$5,500)	49,500
2. Local transportation	5,000
3. Overseas/domestic study visits (provisional sum)	100,000
4. Contingency	1,500
<b>Subtotal</b>	<b>156,000</b>
<b>Total for ADB portion</b>	<b>2,000,000</b>
<b>C. External Environment Monitor</b>	
1. Consultants	
a. Remuneration and per diem (inc. fees, local travel)	
i. National consultant (9 person-months at \$6,000 per month)	54,000
2. Report and translation (10 reports x \$2,000)	20,000
3. Miscellaneous administration	5,000
4. Contingency	10,000
<b>Subtotal</b>	<b>89,000</b>
<b>D. External Resettlement and Social Monitor</b>	
1. Consultants	
a. Remuneration and per diem (inc. fees, local travel)	
i. National consultant (13.5 person-month at \$6,000 per month)	81,000
2. Data collection (Survey)	10,000
3. Report and translation (10 reports x \$2,000)	20,000
4. Miscellaneous administration	5,000
5. Contingency	10,000
<b>Subtotal</b>	<b>126,000</b>
<b>Total for Domestic financed portion</b>	<b>215,000</b>
<b>Grand Total</b>	<b>2,215,000</b>

Source: Asian Development Bank estimates.

## **7. Indicative List of Training Program**

23. The following training programs will be delivered or organized by the project management consulting service during the course of project implementation.

**Table 12: Indicative List of Training Program**

<b>Training program</b>	<b>Scope of Training</b>	<b>Trainer</b>	<b>Trainee</b>
ADB's disbursement procedure and financial management (inc. financial audit)	<ul style="list-style-type: none"> <li>- ADB loan disbursement procedure</li> <li>- Role and responsibility of each stakeholders</li> <li>- Monitoring of fund flow and utilization of loan proceeds</li> <li>- Risk of delay in disbursement</li> </ul>	SCS, PMC	CPG, IAs, PIUs
Organizational financial management and financial audit system	<ul style="list-style-type: none"> <li>- Basic financial management of the project and project implementing entity (e.g., EA, IAs, and PIUs)</li> <li>- Annual financial audit and its preparation for domestic and ADB requirement</li> </ul>	PMC	CPG, IAs, Contractors
Procurement and contract management	<ul style="list-style-type: none"> <li>- ADB's procurement process</li> <li>- Bidding document preparation</li> <li>- ADB's guideline for bid evaluation</li> <li>- Risk of improper procurement and mitigation measures</li> <li>- Handling variation orders and contract management</li> </ul>	SCS, PMC	CPG, IAs, PIUs
Corruption risks in project implementation and anticorruption measures	<ul style="list-style-type: none"> <li>- Definition and type of corruption</li> <li>- Risk of corruption under the project implementation</li> <li>- Mitigation measures</li> <li>- Institutional framework and anticorruption mechanisms</li> <li>- Case studies and international best practices</li> </ul>	PMC	CPG, IAs, PIUs
Operation and maintenance of storm water detention ponds	<ul style="list-style-type: none"> <li>- Basic facility operation and maintenance of storm water detention ponds</li> <li>- Routine maintenance and monitoring</li> <li>- Technical requirement</li> <li>- Facility management (e.g., financial management, governance, emergency response mechanism, occupational health and safety)</li> <li>- Innovative approach in foreign countries</li> </ul>	PMC	CPG, IAs, PIUs
Implementation of EMP and other ADB requirements	<ul style="list-style-type: none"> <li>- Environmental laws, regulations and policies</li> <li>- EMP implementation, including implementation responsibilities, environmental monitoring, inspection and reporting, consultation and participation, mechanism of EMP review, feedback and adjustment</li> <li>- GRM, including GRM structure, responsibilities and timeframe, types of grievances, eligibility assessment</li> <li>- EHS considerations during project construction and operation, including community and occupational health and safety</li> </ul>	PMC	CPG, IAs, PIUs Contractors, local EPBs, GRM access points, other related local bureaus (e.g., water resources bureaus)

<b>Training program</b>	<b>Scope of Training</b>	<b>Trainer</b>	<b>Trainee</b>
Implementation of resettlement plans, REMDP and other ADB requirements	<ul style="list-style-type: none"> <li>- Establishing effective monitoring and inspection and the information flow mechanism</li> <li>- Key indicators and methodology of data collection</li> <li>- Progress of resettlement plans and REMDP reporting</li> <li>- GRM structure, responsibilities, timeframe</li> <li>- Types of grievances, eligibility assessment</li> <li>- Reporting procedures</li> <li>- Communication with the public by different means (innovative community-based advocacy campaigns)</li> </ul>	SCS, PMC	CPG, IAs, PIUs, land resources bureau, other related local bureaus (e.g., cultural relics bureaus), GRM access point  ACWF, bureau responsible for advocacy campaigns
Implementation of GAP, SAP, and other ADB requirements	<ul style="list-style-type: none"> <li>- Establishing effective monitoring and inspection and the information flow mechanism</li> <li>- Key indicators and methodology of data collection</li> <li>- GAP and SAP improvement and reporting</li> <li>- Gender development</li> <li>- GRM structure, responsibilities, timeframe</li> <li>- Types of grievances, eligibility assessment</li> <li>- Reporting procedures</li> <li>- Communication with the public by different means (innovative community-based advocacy campaigns)</li> <li>- Prevention and control of transmissible diseases and HIV/AIDS</li> </ul>	PMC	CPG, IAs, PIUs, other related local bureaus (e.g., cultural relics bureaus), GRM access point  ACWF, bureau responsible for advocacy campaigns
Public financial management at municipal and county level	<ul style="list-style-type: none"> <li>- Strengthen city and counties' credit worthiness</li> <li>- Identify alternative financing options</li> <li>- Revenue enhancement</li> <li>- Expenditure control</li> <li>- Debt management</li> <li>- Domestic and international good practices</li> <li>- Use of performance indicators</li> <li>- Internal audit and financial evaluation</li> </ul>	External resource person engaged by the project management consulting service  PMC	CPG, IAs, PIUs (especially Finance Bureau)
Strategic urban and regional planning	<ul style="list-style-type: none"> <li>- Policy analysis on Chuxiong Yi Autonomous Prefecture's overall regional and urban planning</li> <li>- International and national good practices for strategic regional and urban planning</li> <li>- Regional SWOT assessment for the Chuxiong Yi Autonomous Prefecture and its small and medium-sized cities</li> </ul>	PMC  External resource person engaged by the project management consulting service	CPG and IAs
Municipal solid waste management	<ul style="list-style-type: none"> <li>- International and national good practices for solid waste management</li> <li>- Municipal solid waste management planning approaches</li> <li>- Municipal solid waste management technologies and options</li> <li>- Data collection procedure and waste composition analysis</li> <li>- Stakeholder assessment</li> </ul>	PMC	CPG, IAs, PIUs, other related local bureaus (e.g., urban management bureau)

Training program	Scope of Training	Trainer	Trainee
	<ul style="list-style-type: none"> <li>- Institutional responsibility and setup</li> <li>- Municipal solid waste management policy making</li> <li>- Public awareness program and public willingness</li> <li>- Use of performance indicators</li> <li>- Short, medium, and long-term planning</li> </ul>		
Transport planning	<ul style="list-style-type: none"> <li>- International and national good practice for urban transport planning</li> <li>- Coordination with urban and regional plans</li> <li>- Transport demand and projection analysis</li> <li>- Transport data collection procedure (person-trip survey)</li> <li>- Stakeholder assessment</li> <li>- Institutional responsibility and setup</li> <li>- Policies for promoting sustainable urban transport planning</li> <li>- Public awareness program and public willingness</li> <li>- Use of performance indicators</li> <li>- Short, medium, and long-term planning</li> </ul>	PMC	CPG, IAs, PIUs, other related local bureaus (e.g., transport bureau)
Road safety	<ul style="list-style-type: none"> <li>- International and national good practice for road safety</li> <li>- Road safety audit tools and approaches</li> <li>- Data collection for road safety</li> <li>- Stakeholder assessment</li> <li>- Institutional responsibility and setup</li> <li>- Policies for improving road safety</li> <li>- Public awareness program and education</li> <li>- Use of performance indicators</li> <li>- Short, medium, and long-term planning</li> </ul>	PMC	CPG, IAs, PIUs, other related local bureaus (e.g., transport bureau)
Advanced and innovative operation and maintenance for urban water infrastructure and its services	<ul style="list-style-type: none"> <li>- International and national good practice of water supply pipeline network operation and maintenance</li> <li>- Detection of non-revenue water and its management</li> <li>- Tariff reviews</li> <li>- Short, medium, and long-term investment and financial planning of water supply utilities</li> </ul>	External resource person engaged by the project management consulting service	IAs (water resources bureaus, urban management bureaus), water companies

ACWF = All China Women's Federation, ADB = Asian Development Bank, CPG = Chuxiong Yi Autonomous Prefecture Government, EA = executing agency, EHS = environment health and safety, EMP = environment management plan, EPB = environment protection bureau, GAP = gender action plan, GRM = grievance redress mechanism, IA = implementing agency, PIU = project implementing unit, PMC = project management consultant, REMDP = resettlement and ethnic minority development plan, SAP = social action plan, SCS = startup consulting service, SWOT = strengths, weaknesses, opportunities, threat.

## E. Procurement Guidelines and Resources

<http://www.adb.org/Documents/Guidelines/Procurement/default.asp>

Procurement Guidelines ( in Chinese)

<http://www.adb.org/Documents/Translations/Chinese/Guidelines-Procurement-CN.pdf>

Guidelines on Use of Consultants by ADB and Its Borrowers

<http://www.adb.org/Documents/Guidelines/Consulting/default.asp>

Consulting Services Recruitment Notice:

<http://csrnl.adb.org>

<http://csrnl.adb.org:8080/csrnl/login.jsp>

Templates for engagement of consultants: ( including submission templates)

<http://www.adb.org/Consulting/loan-rfp.asp>

Harmonized RFP (Loans)

<http://www.adb.org/Consulting/all-methods-loan.asp>

Sample Individual consultant contract

<http://www.adb.org/Consulting/ICS-Contract-Loan.pdf>

Consulting Services Operations Manual

<http://www.adb.org/Documents/Manuals/Consulting-Services-Operations-Manual/CSOM.pdf>

Toolkits and Templates for Consultants:

<http://www.adb.org/Consulting/toolkit-template.asp>

Procurement Documents:

<http://www.adb.org/Procurement/prequalification-bid-documents.asp>

User's Guide ( Procurement of Goods)

[http://www.adb.org/Documents/Manuals/Bidding\\_Documents/Goods/SBD-Goods-Users-Guide.pdf](http://www.adb.org/Documents/Manuals/Bidding_Documents/Goods/SBD-Goods-Users-Guide.pdf)

User's Guide (Small Civil Works - below 10 Mln USD)

[http://www.adb.org/Documents/Manuals/bidding\\_documents/prequalification/SBDWorks-sml-UserGuide.pdf](http://www.adb.org/Documents/Manuals/bidding_documents/prequalification/SBDWorks-sml-UserGuide.pdf)

Guide on Bid Evaluation

<http://www.adb.org/site/business-opportunities/operational-procurement/goods-services/documents/guide-bid-evaluation>

Procurement Plans

<http://www.adb.org/Projects/reports.asp?key=reprs&val=PP>

Electronic Procurement

<http://www.mdbegp.org/www/eGPInteractiveus/tabid/69/language/en-US/Default.aspx>

E-GP (Electronic Government Procurement) Toolkit

<http://www.mdbegp.org/www/eGPToolkitus/tabid/67/language/en-US/Default.aspx>

Project Administration Instructions

<http://www.adb.org/Documents/Manuals/PAI/default.asp>

E-Handbook on Project Implementation

<http://www.adb.org/Documents/handbooks/project-implementation/default.asp?p=proj>

Anticorruption and Integrity

<http://www.adb.org/Integrity/default.asp>

How to report fraud and corruption

<http://www.adb.org/Integrity/howto.asp>

## VII. SAFEGUARDS

### A. Environment

1. **Environment due diligence.** The project is classified as category environment category A. A project environmental impact assessment (EIA) was drafted and disclosed on the ADB website on 18 July 2013. The EIA complies with ADB's policies and requirements including ADB's Safeguard Policy Statement (2009).<sup>1</sup> The EIA concludes that the construction and operational impacts can be mitigated through the implementation of the environmental management plan (EMP), which is annexed and forms part of the PAM (Attachment 1). The EMP defines mitigation measures, monitoring requirements, and institutional responsibilities to ensure proper environmental management throughout the project construction and operation.

2. **EMP update, bidding documents.** In the design stage the Chuxiong Yi Prefecture Autonomous project management office (CPPMO) will pass the EMP to the design institutes for incorporating mitigation measures into the detailed designs. The EMP will be updated at the end of the detailed design, as needed, and disclosed on the ADB website. To ensure that bidders will respond to the EMP's provisions, the CPPMO and local PMOs will prepare and provide the following specification clauses for incorporation into the bidding documents: (i) a list of environmental management requirements to be budgeted by the bidders in their proposals, (ii) environmental clauses for contractual terms and conditions, and (iii) individual EIAs, and project EIA including updated EMP for compliance.

3. **EMP implementation responsibilities.** The Chuxiong Yi Autonomous Prefecture Government (CPG), the governments of Chuxiong Municipality, Lufeng County, and Wuding County, and the project implementing units (PIUs) will be responsible for ensuring that the project will be designed, constructed, decommissioned, and operated in accordance with (i) the national and local government environmental, health and safety laws, regulations, procedures, and guidelines; (ii) ADB's Safeguard Policy Statement (2009), and (iii) the EIA including the EMP. CPG holds final responsibility for the implementation and compliance with the EMP. Environmental management units (EMU) will be established within the local PMOs to undertake effective environmental management activities specified in the EMP. The contractors and construction supervision companies will be responsible for internal environmental monitoring and supervision during construction, respectively. Environmental impact monitoring will be conducted by the local environment monitoring stations, contracted by the implementing agencies. An external environment monitor will be contracted by the CPPMO to conduct independent verification of the borrower's compliance with the EMP and progress toward the expected outcomes. EMP implementation and supervision responsibilities are defined in the EMP (Attachment 1, Table EMP-1).

4. **Capacity building.** Capacity building in environmental management will be provided to the local PMOs, PIUs, contractors, and construction and supervision companies in accordance with the training plan (Attachment, Table EMP-9), to ensure adequate institutional capacity in managing the environmental impacts.

5. **Grievance redress mechanism.** Environmental grievances may occur during construction and operation of the project. Each local PMO will establish an environmental grievance redress mechanism which follows the procedure and timeframe defined in the EMP. The loan implementation environment consultant will provide training to the members of the local PMO and

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<sup>1</sup> ADB. 2009. *Safeguard Policy Statement*. Manila.

the access points of the grievance redress mechanism to ensure that responsibilities and procedures are clear. Plans for future public consultation and participation were developed and defined in the EMP. The implementing agencies, through the local PMOs, will be responsible for meaningful consultation and participation during project implementation.

6. The CPG shall make available, and cause the implementing agencies to make available, the necessary budgetary and human resources to fully implement the EMP. If any unanticipated environmental risks and impacts arise during construction or operation of the project that were not considered in the EIA and/or EMP, the CPG, through the implementing agencies, should promptly inform ADB in writing of the occurrence of such risks or impacts, with detailed description of the event and the proposed action plan for incorporation in the updated EMP.

7. Environmental grievances may occur during construction and operation of the project. The CPG and the implementing agencies agreed to establish a project public complaints unit (PPCU) in each PMO. The PPCU will receive environmental grievances and act according to the designed environmental grievance redress mechanism of the project. Procedures and timeframe for the grievance redress process are described in the EIA. The project will provide training to the members of the PPCU and the access points of the grievance redress mechanism to ensure that responsibilities and procedures are clear. Plans for future public consultation and participation were developed and defined in the EMPs. The implementing agencies will be responsible for public consultation during project implementation.

## **B. Involuntary Resettlement**

8. The project is classified as Category A for involuntary resettlement due to significant land acquisition and resettlement impacts. The implementing agencies, with the support of a local institute prepared resettlement plans for: (i) Chuxiong Municipality Longchuan river component; (ii) Chuxiong Municipality road component; (iii) Lufeng urban infrastructure and environment improvement; and (iv) Wuding urban infrastructure and environment improvement, which also addresses indigenous peoples issue. The resettlement planning and implementation is designed to ensure that the affected persons will be better off or at least not worse off as a result of the project.

9. The project affects 96 village groups and communities, 18 villages, and 4 towns, in Chuxiong Municipality, Lufeng County, and Wuding County. Detailed impacts are presented in Table 1. The total permanent land acquisition is 2,261.4 *mu*, including 1.7 *mu* of state-owned land and 2,259.7 *mu* of collective land.<sup>2</sup> The collective land includes farmland, house plot and other lands accounting for 94.5%, 3.4%, and 2.1%, respectively. Total house and building demolition area is 40,814 square meters (m<sup>2</sup>), including residential houses of 36,170 m<sup>2</sup>, rural sheds of 325 m<sup>2</sup> and small shops and institution buildings of 2,625 m<sup>2</sup>. It is estimated that a total of 8,639 persons from 1,987 households will be affected, including 1,833 households to be affected only by land acquisition, 87 households only by house demolition, and 67 households by both.

10. The land acquisition and resettlement compensation standards will follow the *Land Administration Law of the People's Republic of China* (2004), *Law of the People's Republic of China on Administration of the Urban Real Estate* (2007 Revised), *Regulations of Administration of Urban Housing Demolition* (2011), and other applicable guidelines. They will also be based on local policies regarding land acquisition and resettlement (LAR) in Yunnan Province, CPG, Chuxiong Municipal Government, Lufeng County Government, Wuding County Government, and

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<sup>2</sup> A *mu* is a Chinese unit of measurement (1 *mu* = 666.667 m<sup>2</sup>).



ADB's Safeguard Policy Statement (2009). CPPMO, CMG, LCG, WCG, and PIUs will provide necessary assistance for house construction and relocation during resettlement implementation.

11. **Institutional arrangements.** The CPPMO will assume the overall responsibility for the implementation of LAR, including the planning, implementation, financing, and reporting of LAR. The implementing agencies and urban construction investment and management offices of Chuxiong Municipality, Wuding County and Lufeng County will take the primary responsibility for the resettlement consultation, implementation, and timely delivery of entitlements. To ensure smooth implementation, the staff in charge of LAR will undertake training on resettlement implementation organized by the CPPMO. The resettlement implementation schedule has been prepared based on the preparation and construction timetable. The resettlement plans will be updated based on the final design and detailed measurement survey, disclosed to affected persons in local language, and submitted to ADB for review and approval prior to the awarding of civil works contracts.

12. The total estimated budget is CNY871.1 million, including: (i) costs for permanent land acquisition of CNY191.6 million (accounting for 22.00% in the total budget), (ii) compensation for temporary land occupation of CNY0.2 million (0.02%), (iii) compensation for houses demolition of CNY39.2 million (4.50%), (iv) compensation for ground affiliated facilities of CNY31.9 million (3.70%), (v) taxes of CNY516.5 million (59.30%), and (vi) contingency and other costs of CNY 90.7 million (10.40%).

13. **Grievance redress mechanism.** The project implementing agencies will establish the four stages of grievance mechanism at the village-level, city/town government, state land acquisition office, and People's court as elaborated below:

- (i) Stage 1: If any displaced person is dissatisfied with the resettlement plans, s/he can report this to village/community committee orally or in writing. In case of an oral appeal, the village/community committee shall make a disposition and keep written records. Such appeal should be solved within two weeks.
- (ii) Stage 2: If the displaced person is dissatisfied with the disposition of Stage 1, s/he may file an appeal to the city/town government after receiving such disposition, which shall make a disposition within two weeks.
- (iii) Stage 3: If the displaced person is dissatisfied with the disposition of Stage 2, s/he may file an appeal to the State Land and Resources Bureau/House Demolition Management Office after receiving such disposition, which shall make a disposition within 30 days.
- (iv) Stage 4: If the displaced person is still dissatisfied with the disposition of Stage 3, s/he may apply for administrative reconsideration with the CPPMO. Also at any point, s/he may file an administrative action in the district people's court in accordance with the Civil Procedure Law of the PRC after receiving such disposition.

14. Displaced persons may file an appeal on any aspect of resettlement, including compensation rates, etc. The above means of appeal, and the names, locations, persons responsible and telephone numbers of the appeal accepting agencies will be communicated to the displaced persons at a meeting, through an announcement or the resettlement information booklet, so that the displaced persons know their right of appeal. Mass media will be used to strengthen publicity and reporting, and comments and suggestions on resettlement from all parties concerned

will be shared by the resettlement organization at all levels. All agencies will accept grievances and appeals from the affected people for free, and costs so reasonably incurred will be disbursed from the contingency costs. During the whole design and construction periods of the project, these appeal procedures will remain effective to ensure that the affected people can use them to address relevant issues. Affected persons can also submit complaints to ADB which will be handled by the project team. If an affected person is still not satisfied and believes he/she has been harmed due to non-compliance with ADB policy, s/he may submit a complaint to ADB's Accountability Mechanism.<sup>3</sup>

15. **Monitoring.** A detailed plan for both the internal and external monitoring and evaluation is included in the resettlement plans. CPPMO will submit an internal monitoring report through quarterly project monitoring report to ADB. Furthermore, CPPMO will employ an external resettlement monitoring institute or firm to establish an independent external monitoring organization in order to deliver an independent and unbiased external monitoring report. A baseline study of affected persons will be completed for each resettlement plans before the LAR begins and the first monitoring report will be submitted in June 2014. After that and until project completion, semiannual monitoring reports will be prepared and submitted for ADB's review during resettlement implementation and annually for two years after completion of resettlement. The implementation plan of the resettlement plans are summarized in Tables 2–5.

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<sup>3</sup> For further information, see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

**Table 1: Summary of Land Acquisition and Resettlement Impacts (As of October 2013)**

Table 1: Summary of Land Acquisition and Resettlement Impacts (As of October 2019)							
Item		Unit	Chuxiong River Rehabilitation	Chuxiong Road Network	Wuding	Lufeng	Total
Affected township and urban subdistrict		number	1	1	1	1	4
Affected village and community		number	5	3	5	5	18
Affected village groups		number	27	14	22	33	96
Permanent land acquisition	Collective land	mu	190.2	584.8	388.7	1,096.1	2,259.7
	Farmland	mu	190.2	477.3	386.1	1,082.4	2,136.1
	House plot	mu	0	60.4	1.58	13.6	75.6
	Construction land	mu	0	0	0	0	0
	Enterprise land	mu	0	0	0	0	0
	Other land	mu	0	47.0	1	0	48.0
	State land	mu	0	0	1.7	0	1.7
Demolition of residential houses and structures	Total structure area	m <sup>2</sup>	0	29,972	3,789	7,053	40,814
	Rural house	m <sup>2</sup>	0	28,622	670	6,878	36,170
	Rural sheds	m <sup>2</sup>	0	0	150	175	325
	Rural enterprise/shop	m <sup>2</sup>	0	0	0	0	0
	Urban house	m <sup>2</sup>	0	0	1,694	0	1,694
	Urban enterprise/shop	m <sup>2</sup>	0	1,350	1,275	0	2,625
Affected rural households and persons	Acquisition of farmland	household	273	359	540	661	1,833
		person	1,215	1,559	2,392	2,821	7,987
	Demolition of residential houses	household	0	37	2	37	76
		person	0	156	7	143	306
	Both land and house acquisition	household	0	50	5	12	67
		person	0	234	21	53	308
Affected urban households and persons	Demolition of residential houses	household	0	0	11	0	11
		person	0	0	38	0	38
Total of affected households and persons		household	273	446	558	710	1,987
		person	1,215	1,949	2,458	3,017	8,639
Total of enterprises/shops and persons		No.	0	4	13	0	17
		person	0	140	44	0	184
Resettlement Cost		CNY	71,395,400	201,047,500	150,375,100	448,249,600	871,067,600

HH = household, m<sup>2</sup> = square meter, *mu* = a Chinese unit of measurement (1 *mu* = 666.667 m<sup>2</sup>).

Source: Asian Development Bank estimates.

**Table 2: Milestones for Resettlement Activities (Chuxiong urban infrastructure and environment improvement: River)**  
(As of October 2013)

No.	Resettlement	Task	Agency Responsible	Time	Remarks
<b>1</b>	<b>Information disclosure</b>				
1.1	Resettlement information booklet	5 villages with 27 groups	CPPMO, CPMO, Town Government Chuxiong Municipal Resettlement Office, CDIC	Oct 2013	
1.2	Disclosure of the RP including ADB's website		CPPMO, CPMO, ADB	Oct 2013	
<b>2</b>	<b>Budget allocation, detailed measurement survey and resettlement plan Update</b>				
2.1	RP and budget approval (compensation rates)	CNY 71,395,400	CPPMO, CPMO	Mar 2014	
2.2	Village-level income restoration programs	5 villages	CPMO, Village committees	Mar 2014	
2.3	Detailed measurement survey on land acquisition	5 villages	CDIC	Nov 2013	
2.4	RP update after detailed design		CPPMO, CPMO, startup consultant	Dec 2013	
<b>3</b>	<b>Compensation agreement</b>				
3.1	Village-level land compensation agreement	5 villages	CPMO, Chuxiong Municipal LRB	Apr 2014	
<b>4</b>	<b>Implementation of restoration measures</b>				
4.1	Payment of land compensation fees to affected households and land reallocation	5 villages	Township government, village committees	Apr–May 2014	
4.2	Implementation of income restoration programs	5 villages	Village committees	2014–2015	
4.3	Income restoration through business and employment	273 affected households	Township government, village committees, Chuxiong Municipal LSB	2014–2015	
4.4	Implementation of training program	273 affected households	CPMO, Chuxiong Municipal LRB	Mar 2014–Jun 2015	
4.5	Identifying vulnerable households and implementing assistance measures	47 persons	CPMO, Chuxiong Civil Affairs Bureau	2014–2015	
4.6	Hiring affected persons for employment under the project	200 affected persons	CPMO, Chuxiong Municipal LSB	Jun 2014–Dec 2016	
<b>5</b>	<b>Capacity building of resettlement agencies</b>				
5.1	PMO staff training	15 persons	Project management consultant	Jun–Dec 2014	
5.2	Training of city, township and village officials	400 persons	CPPMO, CPMO, Chuxiong Municipal LRB	Jan–Dec 2014	
<b>6</b>	<b>Monitoring and evaluation</b>				
6.1	Baseline survey	Reporting	External resettlement and social monitor	Feb 2014	One time
6.2	Establishing an internal monitoring and evaluation agency	As per the RP	CPPMO, CPMO	Dec 2013	
6.3	Engagement of an external monitor		CPPMO, CPMO	Feb 2014	
6.4	Internal monitoring reporting	Quarterly reporting	CPPMO, CPMO	Mar 2014	First report
6.5	External monitoring reporting	Semiannually reporting	External resettlement and social monitor	Jun 2014	First report
6.6	Resettlement completion report	Reporting	CPPMO, CPMO	Jul 2016	One time

ADB = Asian Development Bank, CDIC = Chuxiong Development and Investment Co. Ltd., CPMO = Chuxiong Municipal project management office, CPPMO = Chuxiong Prefecture project management office, LRB = Land Resources Bureau, LSB = Labor and Social Security Bureau, PMO = project management office, RP = resettlement plan.

Source: Asian Development Bank estimates.

**Table 3: Milestones for Resettlement Activities (Chuxiong urban infrastructure and environment improvement: Road)**  
(As of October 2013)

No.	Resettlement	Task	Agency responsible	Time	Remarks
<b>1</b>	<b>Information disclosure</b>				
1.1	Resettlement information booklet	3 villages with 14 groups	CPPMO, CPMO, Town Government, Chuxiong Municipal Resettlement Office, CDIC	Oct 2013	
1.2	Disclosure of the RP including ADB's website		CPPMO, CPMO, ADB	Oct 2013	
<b>2</b>	<b>Budget allocation, detailed measurement survey and resettlement plan update</b>				
2.1	RP and budget approval (compensation rates)	CNY201,047,500	CPPMO, CPMO	Dec 2013	
2.2	Village-level income restoration programs	3 villages	CPMO, village committees	Dec 2013	
2.3	Detailed measurement survey on land acquisition and house demolition		CDIC	Mar 2014	
2.4	RP update after detailed design		CPPMO, CPMO, startup consultant	Mar 2014	
<b>3</b>	<b>Compensation agreement</b>				
3.1	Village-level land compensation agreement	3 villages	CPMO, Chuxiong Municipal LRB	Dec 2013	
3.2	Household land and house compensation agreements	446 affected households	CPMO, Chuxiong resettlement office	Jan 2014	
<b>4</b>	<b>Implementation of restoration measures</b>				
4.1	Distribution of land compensation fees to affected households and land reallocation	3 villages	Town government, village committees	Jan–May 2014	
4.2	Implementation of income restoration programs	3 villages	Village committees	2013–2014	
4.3	Income restoration through business and employment	446 affected households	Town government, village committees, Chuxiong Municipal LSB	2013–2014	
4.4	Implementation of training program	446 affected households	Chuxiong Municipal LSB	Dec 2013–Jun 2014	
<b>5</b>	<b>Capacity building of resettlement agency</b>				
5.1	PMO staff training	15 persons	Project management consultant	Jun–Dec 2014	
5.2	Training of county, town and village officials	400 persons	CPPMO, CPMO, Chuxiong Municipal LRB	Jan–Dec 2014	
<b>6</b>	<b>Monitoring and evaluation</b>				
6.1	Baseline survey	Reporting	External resettlement and social monitor	Jan 2014	One time
6.2	Establishing an internal monitoring and evaluation agency	As per the RP	CPPMO, CPMO	Dec 2013	
6.3	Engagement an external monitor		CPPMO	Dec 2013	
6.4	Internal monitoring reporting	Quarterly reporting	CPPMO, CPMO	Jan 2014	First report
6.5	External monitoring reporting	Semiannual reporting	External resettlement and social monitor	Jun 2014	First report
6.7	External evaluation and completion report	Reporting	CPPMO, CPMO	Jan 2017	One time

ADB = Asian Development Bank, CDIC = Chuxiong Development and Investment Co. Ltd., CPMO =Chuxiong Municipal project management office, CPPMO = Chuxiong Prefecture project management office, LRB = Land Resources Bureau, LSB = Labor and Social Security Bureau, RP = resettlement plan.

Source: Asian Development Bank estimates.

**Table 4: Milestones for Resettlement Activities (Lufeng urban infrastructure and environment improvement)**  
(As of October 2013)

No.	Resettlement	Task	Agency responsible	Time	Remarks
<b>1</b>	<b>Information disclosure</b>				
1.1	Resettlement information booklet	5 villages with 33 groups	CPPMO, LPMO, Town Government, Lufeng County Resettlement Office, LUCIC	Oct 2013	
1.2	Disclosure of the RP including ADB's website		CPPMO, LPMO, ADB	Oct 2013	
<b>2</b>	<b>Budget allocation, detailed measurement survey and resettlement plan Update</b>				
2.1	RP and budget approval (compensation rates)	CNY448,249,600	CPPMO, LPMO	Dec 2013	
2.2	Village-level income restoration programs	5 affected villages	LPMO, village committees	Dec 2013	
2.3	Detailed measurement survey on land acquisition and house demolition		LUCIC	Mar 2014	
2.4	RP update after detailed design		CPPMO, LPMO, startup consultant	Mar 2014	
<b>3</b>	<b>Compensation agreement</b>				
3.1	Village-level land compensation agreement	5 affected villages	LPMO, Lufeng County LRB	Nov 2013	
3.2	Household land compensation agreement	710 affected households	Lufeng County Resettlement Office	Nov 2013	
3.3	House compensation agreement	49 affected households	Lufeng County Resettlement Office	Nov 2013	
<b>4</b>	<b>House resettlement</b>				
4.1	Selection and approval of housing sites	49 affected households	Lufeng County Government, village committees	Nov–Dec 2013	
4.2	Preparation of housing sites	2 places	Lufeng County Government, village committees	Dec 2013	
4.3	House demolition	49 affected households	Lufeng County Resettlement Office	Dec 2013	
4.4	Building new houses	49 affected households	Village committees and Affected households	Dec 2013–Dec 2014	
4.5	Moving into new houses	49 affected households	Affected households	Dec 2014	
<b>5</b>	<b>Implementation of restoration measures</b>				
5.1	Distribution of land compensation fees to affected households and land reallocation	5 affected villages	Town government, village committees	Dec 2013	
5.2	Implementation of income restoration programs	5 affected villages	Village committees	2013–2015	
5.3	Income restoration through business and employment	710 affected households	Town government, village committees, Lufeng County LSB	2014–2015	
5.4	Implementation of training program	710 affected households	Lufeng County LSB	Dec 2013–Dec 2014	
5.5	Identifying vulnerable households and implementing assistance measures	167 affected households	LPMO, Lufeng County Civil affairs Bureau, Lufeng LSB	2013–2014	
5.6	Identifying and hiring households for employment under the Project	About 1,000 affected persons	LPMO, LUCIC, Contractor	Dec 2013–Dec 2018	
<b>6</b>	<b>Capacity building of resettlement agencies</b>				
6.1	PMO staff training	10 persons	Project management consultant	June–Dec 2014	
6.2	Training of county, township and village officials	50 persons	CPPMO, LPMO, Lufeng County LRB	Jan– Dec 2014	

No.	Resettlement	Task	Agency responsible	Time	Remarks
<b>7</b>	<b>Monitoring and evaluation</b>				
7.1	Baseline survey	Reporting	External resettlement and social monitor	Dec 2013	One time
7.2	Establishing an internal monitoring and evaluation agency	As per the RP	CPPMO, LPMO	Dec 2013	
7.3	Engagement of an external monitor		CPPMO, LPMO	Feb 2014	
7.4	Internal monitoring reporting	Quarterly Reporting	CPPMO, LPMO	Mar 2014	
7.5	External monitoring reporting	Semiannual Reporting	External resettlement and social monitor	Jun 2014	First report
7.6	Resettlement completion report	Reporting	CPPMO, CPMO	Jul 2016	One time

ADB = Asian Development Bank, CPPMO = Chuxiong Prefecture project management office, HD = housing demolition, LPMO = Lufeng project management office, LRB = Land Resources Bureau, LSB = Labor and Social Security Bureau, LUCIC = Lufeng Urban Construction and Investment Co. Ltd., PMO = project management office, RP = resettlement plan.

Source: Asian Development Bank estimates.

**Table 5: Milestones for Resettlement Activities (Wuding urban infrastructure and environment improvement)**  
(As of October 2013)

No.	Resettlement	Task	Agency responsible	Time	Remarks
<b>1</b>	<b>Information disclosure</b>				
1.1	Resettlement information booklet	5 villages with 22 groups	CPPMO, WPMO, Town Government, Wuding County Resettlement Office, WUCIC	October 2013	
1.2	Disclosure of the REMDP including ADB's website		CPPMO, WPMO, ADB	October 2013	
<b>2</b>	<b>Budget allocation, detailed measurement survey and resettlement plan update</b>				
2.1	RP and budget approval (compensation rates)	CNY	CPPMO, WPMO	April 2014	
2.2	Village-level income restoration programs	5 affected villages	WPMO, village committees	April 2014	
2.3	Detailed measurement survey on land acquisition and house demolition		WUCIC	April 2014	
2.4	REMDP update after detailed design		CPPMO, WPMO, startup consultant	May 2014	
<b>3</b>	<b>Compensation agreement</b>				
3.1	Village-level land compensation agreement	5 affected villages	WPMO, Wuding County LRB	May 2014	
3.2	Household land compensation agreement	545 affected households	Wuding County Resettlement Office	June 2014	
3.3	House compensation agreement	18 affected households	Wuding County Resettlement Office	June 2014	
<b>4</b>	<b>Implementation of restoration measures</b>				
4.1	Distribution of land compensation fees to affected households and land reallocation	5 affected villages	Town government, village committees	May–June 2014	
4.2	Implementation of income restoration programs	5 affected villages	Village committees	2014–2015	
4.3	Income restoration through business and employment	558 AHs	Town government, village committees, Wuding County LSB	2014–2015	
4.4	Implementation of training program	558 AHs	Wuding County LSB	May 2014–June 2015	
<b>5</b>	<b>Capacity building of resettlement agencies</b>				
5.1	PMO staff training	5 persons	Project management consultant	June–Dec 2014	
5.2	Training of county, township and village officials	20 persons	CPPMO, WPMO, Wuding County LRB	Jan–Dec 2014	
<b>6</b>	<b>Monitoring and evaluation</b>				
6.1	Baseline survey	Reporting	External resettlement and social monitor	May 2014	One time
6.2	Establishing an internal monitoring and evaluation agency	As per the REMDP	CPPMO, WPMO	April 2014	
6.3	Engagement of an external monitor		CPPMO, WPMO	April 2014	
6.4	Internal monitoring reporting	Quarterly Reporting	CPPMO, WPMO	April 2014	First Report
6.5	External monitoring reporting	Semiannual Reporting	External resettlement and social monitor	May 2014	First report
6.7	Resettlement completion report	Reporting	CPPMO, WPMO	May 2017	One time

ADB = Asian Development Bank, CPPMO = Chuxiong Prefecture project management office, LRB = Land Resources Bureau, LSB = Labor and Social Security Bureau, PMO = project management office, REMDP = resettlement and ethnic minority development plan, WPMO = Wuding project management office, WUCIC = Wuding Urban Construction and Investment Co. Ltd.

Source: Asian Development Bank estimates.



### C. Ethnic Minority

16. Yunnan has the largest number of minority groups, as it is the origin for 26 nationalities, with 25 ethnic minorities accounting for 15 million people, some 34% of the total population. Of these minority nationalities, the Yi is the largest group, with a population of 4.95 million (or 11% of the total population). Other ethnic groups with a population exceeding one million include the Bai, Hani, Zhuang, Dai, and Miao. Among the three project municipality and counties of Chuxiong, Lufeng, and Wuding, only Wuding County is classified as a minority county. The ethnic minority populations in Chuxiong Municipality and Lufeng County are socially and economically well-integrated into the city and are not living in distinct communities. The minority population accounts for 53% of the total population in Wuding County. The project will bring impacts to the local residents mainly due to land acquisition and house demolition, in which the affected minority people in Chuxiong and Lufeng subprojects are less than 10%, however, the affected minority people in Wuding subproject accounts for about 33% of the total affected people and the impacts are largely limited to one Hui village. Due to the potential big impact to the minority people in Wuding County, a resettlement and ethnic minority development plan (REMDP) was prepared for the project which includes specific measures to address both involuntary resettlement and indigenous peoples issues.

17. **Project impacts.** Similar to other affected people by the project, major negative impacts to the minority people are due to: (i) land acquisition and housing demolition, and (ii) social and environmental impacts during construction. The project site in Wuding is close to a minority Hui village, namely Xihe Village, and will be primarily affected by land acquisition. Based on extensive consultation and survey it was concluded that potential impacts will be mitigated by implementing the project REMDP, EMP, and social action plan (SAP).

18. **Benefit to ethnic minorities.** The major benefits of the proposed project include: (i) improved urban infrastructure, public transportation, pedestrian and bicycle facilities and municipal services; (ii) flood control for Wulong River; (iii) urban open space and recreation areas with better environment and ecological conditions along the rehabilitated Wulong River; (iv) improved urban environment and health condition from the implementation of the enhanced municipal solid waste management system; (v) employment opportunities directly created during project construction and after project completion from the operation and maintenance; and (vi) improved opportunities for addressing ethnic minority culture issues in urban planning.

19. **Resettlement and ethnic minority development plan.** A REMDP was developed for the Wuding subproject. The objective of the REMDP is to ensure that adverse impacts on households and communities of ethnic minorities are identified and mitigated, and to seek opportunities to enhance delivery of culturally appropriate benefits under the project. Three categories of actions are included in the REMDP namely, (i) project benefits and enhancement measures, (ii) potential negative impacts and mitigation measures, and (iii) local government complementary ethnic minority development measures to enhance the indirect benefits of the project in long term. Actions include targets for ethnic minority employment under the project; outreach to ensure ethnic minority participation in the public participation process, analysis of ethnic minority responses to public consultation to ensure that their perspectives are properly reflected in the resulting plans, efforts to create public space to ensure ethnic minority cultural celebration can take place. Wuding county government is the implementing agency responsible to endorse the REMDP and the Wuding PMO is primarily responsible for implementing the REMDP including to coordinate with other key local governmental agencies. For the implementation of the REMDP, Wuding Ethnic and Religion Affairs Bureau will provide support in terms of cultural awareness and monitoring of the REMDP effectiveness.

20. **Monitoring.** As a part of REMDP implementation, monitoring on ethnic minority issue will be integrated with involuntary resettlement monitoring for the Wuding subproject (para. 15).

## VIII. GENDER AND SOCIAL DIMENSION

### A. Summary Poverty Reduction and Social Strategy

1. This section describes the required actions for gender and social dimensions, other than social safeguards. A social, poverty and gender analysis was undertaken in accordance with ADB guidelines.<sup>1</sup> The analysis collected information to assist in the design of the project by identifying the poor, examining causes of poverty and recommending poverty reduction measures including non-income poverty within the scope of the project.

2. **Design features.** The project will implement the following.

- (i) **Gender action plan.** The gender action plan (GAP) will promote gender inclusion in the project activities and monitoring system. It will address gender mainstreaming in all project components and under training and capacity building. Implementation and monitoring of the GAP is included in the loan assurances.
- (ii) **Social action plan.** The social action plan (SAP) includes targets for employment for poor and women on project works and subsequent operation and maintenance (O&M), protection of labor that will be employed on project works, mitigation of HIV/AIDS and construction disturbances, and consultation with and participation of community members throughout project implementation. In addition, it ensures that: (i) traffic safety awareness training programs, and (ii) solid waste reuse, reduce, and recycling programs are conducted in the project beneficiary areas of the roads, solid waste management, and flood management subprojects and that local residents are involved in the planning of these awareness programs. Implementation and monitoring of the SAP is included in the loan assurances.

### B. Gender Development and Gender Action Plan

3. The poverty and social analysis indicates that women strongly support all of the subprojects. They perceive that the project will improve their living environment, improve access and mobility, and create employment opportunities. A GAP (Table 1) has been prepared for the project and gender specific parameters have been included in the project's design and monitoring framework to ensure that targets are met, women fully participate in the project and enjoy project benefits, and adverse effects upon women are avoided or mitigated. The project city and county governments will work with the All China Women's Federations (ACWF), city and county government agencies, contractors and communities to facilitate the participation of women in paid work opportunities for physical works; and ensure that all labor laws of the People's Republic of China (PRC) and core labor standards are respected. Analysis of the survey and focus group discussion data reveal that: (i) women are more supportive to have more urban open space and recreation area for better urban environment and ecological condition, (ii) women are disproportionately affected by poor mobility since higher percentage of women are taking public transportation, (iii) women have more concerned to access to tap water and other municipal services due to family and household responsibilities; and (iv) more women are being employed in low-paying jobs. The project will ensure that: (i) priority will be given to women for employment, including a 20% target for project employment opportunities during the project construction phase, and 50% target for the project operation phase; (ii) women will not

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<sup>1</sup> ADB. 2001. *Handbook on Poverty and Social Analysis*. Manila.

be discriminated on the basis of age or sex with respect to any job that they are capable of carrying out; (iii) sex disaggregated baseline and survey data will be collected; and (iv) the GAP is implemented. The local PMOs with the assistance of the project management consulting firm are responsible for the implementation of the GAP, and reporting on progress and achievements of the project. The three municipal and county governments agreed to provide necessary costs for implementation of the GAP (Table 1) and SAP (Table 2). All activities in GAP are part of the capacity building component (e.g., training, consultation, awareness raising activities) and implementation of SAP therefore, no additional cost is required specifically for the GAP.

### **C. Social Development and Social Action Plan**

4. The SAP was prepared for the project. It sets out activities (i) for the mitigation of adverse impacts and risks identified in the course of the poverty and social analysis of the project, and (ii) to help maximize the benefits to be derived from the project.

5. To address the risk of the spread of HIV/AIDS, the project requires contractors to provide all their workers with training in the transmission and prevention of both HIV/AIDS and other sexually transmitted infections (STIs). The Center for Disease Control in each city and county has agreed to conduct initial trainings at commencement of contract work and at any time when a large number of new employees are mobilized simultaneously. Recommendations specific to this particular aspect of the SAP implementation include:

- (i) Separate sessions to be held for men and women.
- (ii) If employees are employed one or a few at a time, they should be briefed by a member of the contractor's staff of the same sex as the employee, as part of the induction process for all new employees.
- (iii) The Center for Disease Control may be asked to ensure that such briefings are carried out in an accurate and effective manner.
- (iv) Contractors should be advised to try and ensure that a means of purchasing condoms is readily accessible if construction workers are housed where such access might otherwise be limited.

6. The creation of new job opportunities is seen as a very important outcome of the project in most of the project areas. It will be important that project employment opportunities for unskilled workers are advertised well in advance through media and notices in the public places most frequented by village and community residents. The project specific recommendations include:

- (i) In conjunction with the Department of Labor and Social Security, Poverty Alleviation and Development Office and/or ACWF, local PMOs ensure local advertising process is in place to assist, for contractors to recruit appropriate local labor.
- (ii) In some areas, local people employed by contractors may have had very little experience in the labor market of anything other than very short-term casual work. Measures to protect those local labors may be necessary, which requires

all employees to have a written contract, and information about whom they can approach to help resolve labor disputes or misunderstandings.

- (iii) Timelines of the consultation meeting and public notice about the project may be carefully considered to give sufficient warning of start dates for physical works to enable local people to make appropriate decisions.

#### **D. Other Social Aspects**

7. Project construction workers will be engaged locally. As ensured in the assurances, construction workers from the local communities will be trained on the (i) prevention and control of transmissible diseases and HIV/AIDS, and (ii) community disturbance and sensitization. In addition, capacity building will be undertaken with respect to advocating behavioral change.

8. **Labor issues.** Core labor standards will be implemented. Civil works contracts will stipulate priorities to (i) employ local people for works, (ii) ensure equal opportunities for women and men, (iii) pay equal wages for work of equal value, (iv) pay women's wages directly to them, (v) not employ children or forced labor, and (vi) ensure that all contracted labor have written contracts. Specific targets for employment have been included in the GAP, and SAP. CPG and the three project city and county governments are responsible for the implementation of the GAP, and SAP; and the local PMOs will report on the progress and achievements to CPPMO. The detailed SAP is provided in Table 2.

9. Under the project management consulting service, a social and gender specialist will be engaged to support the three project city and county PMOs to implement, monitor, and report on progress of the GAP, SAP, and other social aspects.

**Table 1: Gender Action Plan**

Activity	Target and Indicators	Responsible Party	Timeline
<b>A. Across all outputs</b>			
<b>1. Project management</b> (i) Resettlement, social development, and gender specialists are included in the PMC during project implementation to guide GAP implementation and provide training. (ii) At least one staff member is responsible for social and gender issues in each PMO and PIUs. (iii) At least one woman in community offices is nominated to act as link between residents and the PMO. (iv) Time and places designated for project information dissemination, consultancy, and advocacy sessions are appropriate for women.	(i) 100% activities designed in GAP are implemented with instruction of the specialist and support of the staff (ii) One person appointed to this role in CPMO, LPMO, WPMO, PIUs, and community office (iii) 50% of attendees shall be women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, project city and county governments, labor and social security bureaus, poverty alleviation and development offices, ACWF	Throughout project implementation
<b>2. Project management consultant.</b> The PMC team to include social development consultants (both international and national) on team, preferably with experience in planning community-based advocacy campaigns.	(i) Number of person-months and visits allocated to PMC (ii) Project PMO staff responsible for gender and social issues receive timely advice	PMC	At time of appointment of PMC
<b>3. Contractors</b> (i) Provide equal pay for equal work and do not discriminate in employment. (ii) Set the target of women employees. (iii) Ensure work environment and conditions on construction sites are responsive to women's needs. (iv) Provide separate training on transmission and prevention of HIV/AIDS for female and male employees. (v) Hold resident information sessions on start and completion dates, temporary disruption to services, and safety prior to commencement of any major works.	(i) Number of workers recruited (disaggregated by sex and position) (ii) 20% of job positions for female labors (iii) Separate sanitary facilities (toilets) are available for women on all construction sites (iv) 100% women workers attended the HIV/AIDS training	CPPMO, CPMO, LPMO, WPMO, PIUs, ACWF, community committees, contractors, local labor and social security bureaus, CDPCs	Throughout project implementation
<b>4. Operators</b> (i) Provide job opportunity of simple landscaping work. (ii) Provide job opportunity of street cleaning work, and waste collection work.	50% of whom employed in landscaping and simple road maintenance work shall be women	CPPMO, CPMO, LPMO, WPMO, ACWF, urban management bureaus, labor bureaus	Upon completion of project works
<b>B. Flood management and river enhancement component of all three subprojects</b>			
<b>Public environmental protection and flood warning awareness and education.</b> Public awareness programs on environmental protection, water conservation, flood warning, and construction safety conducted in direct project areas.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, PIUs, community committees, PMC	Throughout project implementation

Activity	Target and Indicators	Responsible Party	Timeline
<b>C. Urban road and related environment infrastructure component of all three subprojects</b>			
<b>Public traffic safety awareness and education.</b> Road safety programs for schools and residents focusing on nonmotorized transport and pedestrian safety are conducted.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, community committees, education bureaus, PMC	Throughout project implementation
<b>D. Solid waste management component of all three subprojects</b>			
<b>1. Public solid waste management awareness and education.</b> Public awareness programs on environmental protection and sanitation management, location of garbage bins, garbage collection, transportation and sanitary disposal, 3Rs, and solid waste management in communities and schools are conducted.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, PIUs, community committees, local education bureaus, PMC	Throughout project implementation
<b>2. Public participation to solid waste tariffs.</b> Public hearings for solid waste tariff in project city and counties are held.	(i) 50% of attendees shall be women (ii) Number of hearings held (iii) Participants and elected representatives (sex disaggregated)	CPPMO, CPMO, LPMO, WPMO, finance bureaus, price bureaus, and community committees	Public hearing event during the project implementation
<b>E. Capacity development and institutional strengthening component</b>			
<b>1. Capacity development for staff in PMOs and PIUs.</b> (i) Gender awareness training for project PMOs and PIUs staff, to include discussion on (a) ADB gender policies, (b) GAP, and (c) the benefits from gender mainstreaming in infrastructure projects. (ii) Training plan is developed with gender targets.	(i) 100% staff of PMO and IAs receive the training (ii) 50% of attendees shall be women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC	Throughout project implementation
<b>2. Local community empowerment</b> (i) Workshops on social inclusion and equitable access to the new economy are organized. (ii) Workshops on urban expansion and employment are held. (iii) Case studies on social impacts of urbanization are conducted.	(i) 50% of attendees shall be women (ii) Number and kind of CSO and participants (sex disaggregated) (iii) Workshop and case study reports with gender analysis sections	CPPMO, CPMO, LPMO, WPMO, PIUs, and project city and county governments, and community committees	Throughout project implementation
<b>3. Public participation in urban design and planning</b> (i) Public participation and consultation in discussion of future urban expansion planning. (ii) Public participation and consultation in preparation of future infrastructure construction projects.	(i) 50% of attendees shall be women (ii) Number and kind of CSO and participants (sex disaggregated) (iii) Reports with gender analysis sections	CPPMO, CPMO, LPMO, WPMO, PMC, urban planning agency, and community committees	New urban design and master plan study during the project implementation

3Rs = reduce, reuse, and recycle, ACWF = All China Women's Federation, ADB = Asian Development Bank, CDPC = centers for disease prevention and control, CPMO = Chuxiong project management office, CPPMO = Chuxiong Yi autonomous prefecture project management office, CSO = civil society organization, GAP = gender action plan, IAs = implementing agencies, LPMO = Lufeng project management office, PIU = project implementing unit, PMC = project management consultant, PMO = project management office, WPMO = Wuding project management office. Source: Asian Development Bank estimates.

Activity	Target and Indicators	Responsible Party	Timeline
<b>A. Across all outputs</b>			
<b>1. Project management</b> (i) Resettlement, social development, and gender specialists are included in the PMC during project implementation to guide GAP implementation and provide training. (ii) At least one staff member is responsible for social and gender issues in each PMO and PIUs. (iii) At least one woman in community offices is nominated to act as link between residents and the PMO. (iv) Time and places designated for project information dissemination, consultancy, and advocacy sessions are appropriate for women.	(i) 100% activities designed in GAP are implemented with instruction of the specialist and support of the staff (ii) One person appointed to this role in CPMO, LPMO, WPMO, PIUs, and community office (iii) 50% of attendees shall be women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, project city and county governments, labor and social security bureaus, poverty alleviation and development offices, ACWF	Throughout project implementation
<b>2. Project management consultant.</b> The PMC team to include social development consultants (both international and national) on team, preferably with experience in planning community-based advocacy campaigns.	(i) Number of person-months and visits allocated to PMC (ii) Project PMO staff responsible for gender and social issues receive timely advice	PMC	At time of appointment of PMC
<b>3. Contractors</b> (i) Provide equal pay for equal work and do not discriminate in employment. (ii) Set the target of women employees. (iii) Ensure work environment and conditions on construction sites are responsive to women's needs. (iv) Provide separate training on transmission and prevention of HIV/AIDS for female and male employees. (v) Hold resident information sessions on start and completion dates, temporary disruption to services, and safety prior to commencement of any major works.	(i) Number of workers recruited (disaggregated by sex and position) (ii) 20% of job positions for female labors (iii) Separate sanitary facilities (toilets) are available for women on all construction sites (iv) 100% women workers attended the HIV/AIDS training	CPPMO, CPMO, LPMO, WPMO, PIUs, ACWF, community committees, contractors, local labor and social security bureaus, CDPCs	Throughout project implementation
<b>4. Operators</b> (i) Provide job opportunity of simple landscaping work. (ii) Provide job opportunity of street cleaning work, and waste collection work.	50% of whom employed in landscaping and simple road maintenance work shall be women	CPPMO, CPMO, LPMO, WPMO, ACWF, urban management bureaus, labor bureaus	Upon completion of project works
<b>B. Flood management and river enhancement component of all three subprojects</b>			
<b>Public environmental protection and flood warning awareness and education.</b> Public awareness programs on environmental protection, water conservation, flood warning, and construction safety conducted in direct project areas.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, PIUs, community committees, PMC	Throughout project implementation



Activity	Target and Indicators	Responsible Party	Timeline
<b>C. Urban road and related environment infrastructure component of all three subprojects</b>			
<b>Public traffic safety awareness and education.</b> Road safety programs for schools and residents focusing on nonmotorized transport and pedestrian safety are conducted.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, community committees, education bureaus, PMC	Throughout project implementation
<b>D. Solid waste management component of all three subprojects</b>			
<b>1. Public solid waste management awareness and education.</b> Public awareness programs on environmental protection and sanitation management, location of garbage bins, garbage collection, transportation and sanitary disposal, 3Rs, and solid waste management in communities and schools are conducted.	(i) 50% of attendees shall be women (ii) Number of beneficiaries and kind of trainings (iii) Training materials	CPPMO, CPMO, LPMO, WPMO, PIUs, community committees, local education bureaus, PMC	Throughout project implementation
<b>2. Public participation to solid waste tariffs.</b> Public hearings for solid waste tariff in project city and counties are held.	(i) 50% of attendees shall be women (ii) Number of hearings held (iii) Participants and elected representatives (sex disaggregated)	CPPMO, CPMO, LPMO, WPMO, finance bureaus, price bureaus, and community committees	Public hearing event during the project implementation
<b>E. Capacity development and institutional strengthening component</b>			
<b>1. Capacity development for staff in PMOs and PIUs.</b> (i) Gender awareness training for project PMOs and PIUs staff, to include discussion on (a) ADB gender policies, (b) GAP, and (c) the benefits from gender mainstreaming in infrastructure projects. (ii) Training plan is developed with gender targets.	(i) 100% staff of PMO and IAs receive the training (ii) 50% of attendees shall be women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC	Throughout project implementation
<b>2. Local community empowerment</b> (i) Workshops on social inclusion and equitable access to the new economy are organized. (ii) Workshops on urban expansion and employment are held. (iii) Case studies on social impacts of urbanization are conducted.	(i) 50% of attendees shall be women (ii) Number and kind of CSO and participants (sex disaggregated) (iii) Workshop and case study reports with gender analysis sections	CPPMO, CPMO, LPMO, WPMO, PIUs, and project city and county governments, and community committees	Throughout project implementation
<b>3. Public participation in urban design and planning</b> (i) Public participation and consultation in discussion of future urban expansion planning. (ii) Public participation and consultation in preparation of future infrastructure construction projects.	(i) 50% of attendees shall be women (ii) Number and kind of CSO and participants (sex disaggregated) (iii) Reports with gender analysis sections	CPPMO, CPMO, LPMO, WPMO, PMC, urban planning agency, and community committees	New urban design and master plan study during the project implementation

3Rs = reduce, reuse, and recycle, ACWF = All China Women's Federation, ADB = Asian Development Bank, CDPC = centers for disease prevention and control, CPMO = Chuxiong Municipal project management office, CPPMO = Chuxiong Yi autonomous prefecture project management office, CSO = civil society organization, GAP = gender action plan, IAs = implementing agencies, LPMO = Lufeng project management office, PIU = project implementing unit, PMC = project management consultant, PMO = project management office, WPMO = Wuding project management office.

Source: Asian Development Bank estimates.

**Table 2: Social Action Plan**

Activity	Target and Indicators	Responsibility Party	Budget and Cost	Timeline
<b>A. Across all outputs/subprojects</b>				
<b>1. Project management.</b> (i) Roles and responsibilities involving social issues are allocated to appropriate staff in the CPPMO, CPMO, LPMO, and WPMO and PIUs. (ii) Roles and responsibilities, include liaising with other agencies, involved in SAP implementation, are spelled out in the terms of references of the designated staff.	(i) Staff designated to fulfill responsibilities associated with implementation of the SAP, GAP, resettlement plans, and REMDP (ii) Designated staff are able to perform planned gender and social related responsibilities in a timely manner (iii) Terms of references prepared for designated staff, which outlines all responsibilities associated with implementation	CPPMO, CPMO, LPMO and WPMO	No additional cost	Before commencement of project implementation
<b>2. Project management consultant.</b> The PMC team to include social and gender consultants (both international and national) on team, preferably with experience in planning community-based advocacy campaigns.	(i) Number of contract months and visits allocated to PMC (social and gender specialist) (ii) CPPMO, CPMO, LPMO, and WPMO staff responsible for gender and social issues able to receive specialist advice in a timely manner as and when needed	PMC	Part of PMC budget	At time of appointment of PMC
<b>3. Contractors -</b> (i) conform to all national and provincial labor regulations and project assurances; (ii) protect the surrounding environment near construction sites; (iii) provide sex-segregated HIV/AIDS and STI education to all workers; (iv) recruit unskilled labor locally, and demonstrate due diligence in attempting to meet a target of female workers and poor households; (v) ensure to use local construction materials (e.g., rock, gravel, clay, cement produced from Chuxiong Prefecture or Yunnan Province); and (vi) ensure training on labor law, job skills, safety, sanitation.	(i) Contractors follow all regulations and requirements in assurances (ii) No environmental problems created for neighboring villages (iii) All workers receive HIV/AIDS awareness and prevention training (iv) 20% of women, 30% of ethnic minority people and 15% of poor for unskilled labor in landscaping and civil work (v) 70% local materials (vi) 100% contracted labors get training	CPMO, LPMO, WPMO, contractors, local labor and social security bureaus, ACWF, local CDPCs	Contractors' budget  Local CDPCs costs included in local health bureau  Budget: (CNY 200,000)	Throughout construction

Activity	Target and Indicators	Responsibility Party	Budget and Cost	Timeline
<b>4. Operators</b> recruit unskilled labor locally, and demonstrate due diligence in attempting to meet a target of female workers and poor households during construction and operation.	50% women, 30% of ethnic minority people, and 15% of poor for labor in landscaping, road and river maintenance and solid waste management	Local urban management bureaus, ACWF	Included in project operation cost	After completion of the subprojects
<b>B. Flood management and river enhancement component.</b> (Chuxiong urban infrastructure and environment improvement, Lufeng urban infrastructure and environment improvement, and Wuding urban infrastructure and environment improvement)				
<b>1. Protection of local communities.</b> Ensure farmland irrigation during river rehabilitation construction.	(i) No interruption of farmland irrigation at the project areas (ii) No complaints from local and project affected communities	CPPMO, CPMO, LPMO, WPMO, PIUs, contractors, community committees, and PMC (environment specialist, resettlement, social development and gender specialists)	Included in project cost for civil works	Throughout project implementation
<b>2. Public environmental protection and flood warning awareness and education.</b> Ensure public awareness programs on environmental protection, water conservation, flood warning, and construction safety in the direct project areas are conducted.	50% of attendees are women, 30% of attendees are ethnic minority, and attendees include higher percent of urban poor in project city and counties than their respective average	CPPMO, local PMOs, PIUs, community committees, and PMC (resettlement, social development and gender specialists)	Included in capacity development and institutional strengthening and project city and county governments Budget: (CNY200,000)	Throughout project implementation
<b>C. Urban road and related environmental infrastructure component.</b> (Chuxiong urban infrastructure and environment improvement, Lufeng urban infrastructure and environment improvement, and Wuding urban infrastructure and environment improvement)				
<b>1. Protection of local communities</b> (i) Reconstruct public facilities such as road, poles and transformers recovery due to pipe installation. (ii) Construction safety enhancement, including temporary road traffic (e.g., condition of temporary roads and proper warning sign).	(i) 100% recovery of public facilities (ii) Proper installation of temporary roads and road signs (iii) No complaints from local and project affected communities	CPPMO, CPMO, LPMO, WPMO, PIUs, contractors, community committees, and PMC (environment specialist, resettlement, social development and gender specialists)	Included in project cost for civil works	Throughout project implementation

Activity	Target and Indicators	Responsibility Party	Budget and Cost	Timeline
<b>2. Public sanitation awareness and education.</b> (i) Public sanitation management campaign in schools (e.g. lecture or picture exhibition) (ii) Public sanitation management campaign in the direct project areas (e.g. poster, picture exhibition)	(i) 100% primary and middle schools in the direct project areas (9 primary, and 6 middle schools) (ii) 70% of attendees are local residents (378,000 urban residents in the direct project areas) (iii) 50% of attendees are women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, local education bureaus, health bureaus, and construction bureaus, community committees, and PMC (resettlement, social development and gender specialists)	Included in capacity development and institutional strengthening and project city and county governments Budget: (CNY200,000)	Throughout project implementation
<b>3. Public traffic safety awareness and education.</b> (i) Road safety campaign in schools (picture exhibition, etc.) (ii) Road safety campaign in the direct project areas (e.g., poster, picture exhibition) (iii) Traffic signal and marks on street road construction safety	(i) 100% of primary and middle schools in the direct project areas (3 primary, and 3 middle schools) (ii) 70% of attendees are local residents (20,000 rural residents and 60,000 urban residents in the direct project areas) (iii) 50% of attendees are women (rural and urban residents)	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, local education bureaus, and transport police departments, community committees, and PMC (resettlement, social development and gender specialists)	Included in capacity development and institutional strengthening project city and county governments Budget: (CNY150,000)	Throughout project implementation
<b>4. Public participation to water tariffs.</b> Public hearings for water tariff in project city and counties	(50% of attendees are women, 30% of attendees are ethnic minority, and attendees include higher percentage of urban poor in project city and counties than their respective average)	CPPMO, CPMO, LPMO, WPMO, local finance bureaus, price bureaus, and community committees	No budget need	Public hearing event during the project implementation

Activity	Target and Indicators	Responsibility Party	Budget and Cost	Timeline
<b>D: Solid waste management component.</b> (Chuxiong urban infrastructure and environment improvement, Lufeng urban infrastructure and environment improvement, and Wuding urban infrastructure and environment improvement)				
<b>1. Public solid waste management awareness and education.</b> Public consultation and awareness raising for location of garbage bins, garbage collection, transportation and sanitary disposal, 3Rs, and solid waste management in communities and schools conducted.	(i) 100% of primary and middle schools in the direct project areas (9 primary, and 6 middle schools) (ii) 70% of attendees are local residents (378,000 urban residents in the direct project areas) (iii) 50% of attendees are women	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, local education bureaus, health bureaus, and construction bureaus, community committees, and PMC (resettlement, social development and gender specialists)	Included in capacity development and institutional strengthening and project city and county governments Budget: (CNY200,000)	Throughout project implementation
<b>2. Public participation to solid waste tariffs.</b> Public hearings for solid waste tariff in project city and counties	50% of attendees are women, 30% of attendees are ethnic minority, and attendees includes more than average percentage of urban poor in project city and counties	CPPMO, CPMO, LPMO, WPMO, local finance bureaus, price bureaus, and community committees	No budget need	Public hearing event during the project implementation
<b>E. Capacity development and institutional strengthening component.</b> (Chuxiong urban infrastructure and environment improvement, Lufeng urban infrastructure and environment improvement, and Wuding urban infrastructure and environment improvement)				
<b>1. Local community empowerment</b> (i) Workshops on social inclusion and equitable access to the new economy (particularly for the urban poor and farmer transitions) (ii) Workshops on urban expansion and employment (local poor, rural labor opportunity, ethnic minority) (iii) Case studies on social impacts of urbanization	(i) 80% of relevant government officers participate in the workshop (ii) 50% representatives of communities and 50% female participants in the project areas participate in the workshop	CPPMO, CPMO, LPMO, WPMO, PIUs, and project city and county governments, and community committees	Included in capacity development and institutional strengthening (CNY100,000)	Throughout project implementation
<b>2. Public participation in urban design and planning</b> (i) Ensure public participation and consultation in discussion of future urban expansion planning (ii) Ensure public participation and consultation in preparation of future infrastructural construction projects	50% of attendees are women, 30% of attendees are ethnic minority, and attendees include higher percentage of urban poor in project city and counties than their respective average	CPPMO, CPMO, LPMO, WPMO, PMC, urban planning agency, local construction bureaus, development and reform commissions, and community committees	Included in capacity development and institutional strengthening (CNY150,000)	New urban design and master plan study during the project implementation

Activity	Target and Indicators	Responsibility Party	Budget and Cost	Timeline
<b>3. Non-farming employment and livelihood improvement training</b> (i) Promote information and training on non-farming jobs for local jobs and migrant jobs to rural labors (ii) Provide training to migrant laborers on labor law, contract, and right issues	50% of attendees are women, 30% of attendees are ethnic minority, and attendees include higher percentage of urban poor in project city and counties than their respective average	CPPMO, CPMO, LPMO, WPMO, PIUs, PMC, local labor bureaus, civil affairs bureaus, poverty alleviation and development offices, and community committees	Included in capacity development and institutional strengthening and local governments' job training budget (CNY1 million)	Throughout project implementation

3Rs = reduce, reuse, recycle, ACWF = All China Women's Federation, CDPC = centers for disease prevention and control, CPMO = Chuxiong Municipal project management office, CPPMO = Chuxiong Yi Autonomous Prefecture project management office, GAP = gender action plan, LPMO = Lufeng project management office, PIUs = project implementing units, PMC = project management consultants, REMDP = resettlement and ethnic minority development plan, SAP = social action plan, STI = sexually transmitted infection, WPMO = Wuding project management office.

Source: Asian Development Bank estimates.

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

### A. PROJECT DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<b>Impact</b> More competitive, green, and inclusive city development in Chuxiong Municipality, Lufeng County, and Wuding County that will support the development of the Yunnan central city cluster	<b>By 2022 (Baseline 2011)</b> <b>Competitive.</b> Average per capita disposable income of urban households increased by 8% per annum from CNY 19,417 in Chuxiong, 8% per annum from CNY 18,980 in Lufeng, and 7% per annum from CNY 15,018 in Wuding <b>Green.</b> Open urban green space increased by 100,000 m <sup>2</sup> per annum in Chuxiong, 95,000 m <sup>2</sup> in Lufeng, and 55,000 m <sup>2</sup> in Wuding <b>Inclusive.</b> Public satisfaction with environmental and municipal services increased from 67.5% to 80.0% in Chuxiong, from 23.8% to 50.0% in Lufeng, and from 20.0% to 50.0% in Wuding (based on sex disaggregated data) Contribution of the Yunnan central city cluster to Yunnan's GDP increased from 57% to 70%	Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County  Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County  Statistics published annually by Yunnan provincial statistical office	<b>Assumptions</b> Socioeconomic development of Yunnan Province and the Chuxiong Yi autonomous prefecture is steady, in accordance with the Twelfth Five-Year Plan for 2011–2015. The Chuxiong, Lufeng, and Wuding governments allocate adequate budgets for operation and maintenance of the facilities. <b>Risk</b> Insufficient funds are available to support implementation of Chuxiong, Lufeng, and Wuding urban master plans.
<b>Outcome</b> Urban infrastructure services and environment improved in cities of Chuxiong Municipality, Lufeng County, and Wuding County	<b>By 2019 (baseline 2011)</b> Area exposed to once-in-50-year flood risk reduced by 4.1 km <sup>2</sup> in Chuxiong. Once-in-20-year flood risk reduced by 4.9 km <sup>2</sup> in Lufeng and by 2.3 km <sup>2</sup> in Wuding Nonmotorized traffic lanes increased by 14.8 km in Chuxiong, 12.2 km in Lufeng, and 5.7 km in Wuding Coverage of municipal solid waste service area increased from 22.5 km <sup>2</sup> to 27.0 km <sup>2</sup> in Chuxiong, from 8.0 km <sup>2</sup> to 9.6 km <sup>2</sup> in Lufeng, and from 14.0 km <sup>2</sup> to 16.8 km <sup>2</sup> in Wuding More than 80% of the urban streets cleaned. (Baselines: 64% in Chuxiong, 55% in Lufeng, and 51% in Wuding) 3,558 jobs and 306 positions provided during construction and operation, of which 20% during construction and 50% during operations are for women and, overall, 30% are for ethnic minorities and 15% are for the poor	Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County  Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County  Statistical yearbooks of Chuxiong Municipality, Lufeng County, and Wuding County Project completion and quarterly progress reports	<b>Assumptions</b> Government commitment and support for environmentally sustainable urban development continues. Project facilities are properly operated and maintained. <b>Risk</b> Development of local human and financial capacities to manage expanding urban infrastructure in Chuxiong, Lufeng, and Wuding is slow.

<b>Design Summary</b>	<b>Performance Targets and Indicators with Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
<b>Outputs</b> 1. Chuxiong urban infrastructure and environment improved	<b>By 2019 (baseline 2011)</b> 6.2 km of new dike and slope protection completed and operational Enhanced flood early warning and monitoring system installed and operational 9.0 km of roads, 18.8 km of sewage pipeline, 19.0 km of water supply pipelines, 19.2 km of storm water pipelines, and 29 sewage interceptor facilities completed and operational 4 solid waste transportation vehicles, 2,500 trash bins and containers, and 6 street cleaning vehicles provided and operational 50% of those employed in landscaping, simple road cleaning, and solid waste collection work are women	Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports	<b>Assumptions</b> Project counterpart funding is appropriated on time. Untreated sewage from Fumin village is intercepted on-time. <b>Risk</b> Land acquisition approvals and implementation are delayed.
2. Lufeng urban infrastructure and environment improved	12.2 km of dike and slope protection completed and operational Enhanced flood early warning and monitoring system installed and operational 7.5 km of roads, 15.5 km of sewage pipelines, 15.9 km of water supply pipelines, 18.6 km of storm water pipelines, and 4 sewage interceptor facilities completed and operational Storm water detention pond with 68,135 m <sup>3</sup> storage capacity completed and in operation 4 solid waste transportation vehicles and 10 street cleaning vehicles provided and operational 50% of those employed in landscaping, simple road cleaning, and solid waste collection work are women	Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports  Project completion and quarterly progress reports	<b>Assumptions</b> Project counterpart funds are appropriated on time. Project funded by Water Resource Bureau is completed on time. Interception of untreated sewage from the existing Dabeichang, Xiaobeichang, and Shangying villages is coordinated smoothly. <b>Risk</b> Land acquisition approvals and implementation are delayed.
3. Wuding urban infrastructure and environment improved	5.2 km dike and slope protection completed and operational Enhanced flood early warning and monitoring system installed and operational 9.4 km of roads, 13.4 km of sewage pipelines, 17.9 km of water supply pipelines, 20.3 km of storm water pipelines, and 10 sewage interceptor facilities completed and operational	Project completion and quarterly progress reports Project completion and quarterly progress reports  Project completion and quarterly progress reports	<b>Assumptions</b> Project counterpart fund is provided on time. Interception of untreated sewage from the existing Daxi and Xiaoxi villages is coordinated smoothly. <b>Risk</b> Land acquisition approvals and implementation are



Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	<p>Storm water detention pond with 1,688 m<sup>3</sup> storage capacity completed and in operation</p> <p>3 solid waste transportation vehicles, 198 trash containers, 1 street cleaning vehicle provided, installed, and operational</p> <p>50% of those employed in landscaping, simple road cleaning, and solid waste collection work are women</p>	<p>Project completion and quarterly progress reports</p> <p>Project completion and quarterly progress reports</p> <p>Project completion and quarterly progress reports</p>	<p>delayed</p>
4. Capacity and institutional strength of the executing and implementing agencies increased	<p>Training, with 50% of attendees women, conducted on (i) project management; (ii) public financial management for project cities; (iii) solid waste management assessment and planning; and (iv) road safety and transport planning assessment</p> <p>Workshops on social inclusion and equitable access to the new economy organized, with 50% of attendees women</p>	<p>Project completion report and quarterly progress reports</p> <p>Project completion report and quarterly progress reports</p>	<p><b>Assumption</b> Staff of relevant bureaus, project operation and maintenance entities, and public and related stakeholders participate in capacity-building training.</p> <p><b>Risk</b> Recruitment of the project implementation consultants is delayed.</p>

Activities with Milestones	Inputs
<p><b>1. Chuxiong urban infrastructure and environment improved</b></p> <p>1.1 Carry out detailed design and update of resettlement plans by Q1 2015</p> <p>1.2 Carry out land acquisition and resettlement by Q4 2015</p> <p>1.3 Complete bidding and award contract by Q3 2017</p> <p>1.4 Purchase solid waste equipment by Q2 2017</p> <p>1.5 Construct dike by Q2 2018</p> <p>1.6 Build roads by Q2 2018</p> <p>1.7 Carry out landscaping and slope protection works by Q4 2018</p> <p><b>2. Lufeng urban infrastructure and environment improved</b></p> <p>2.1 Carry out detailed design and update of resettlement plan by Q2 2015</p> <p>2.2 Carry out land acquisition and resettlement by Q4 2016</p> <p>2.3 Complete bidding and award contract by Q4 2017</p> <p>2.4 Purchase solid waste equipment by Q4 2016</p> <p>2.5 Build dike by Q2 2017</p> <p>2.6 Construct storm water detention pond by Q2 2017</p> <p>2.7 Construct roads by Q2 2018</p> <p>2.8 Carry out landscaping and slope protection works by Q4 2018</p> <p><b>3. Wuding urban infrastructure and environment improved</b></p> <p>3.1 Carry out detailed design and update of REMDP by Q4 2015</p> <p>3.2 Carry out land acquisition and resettlement by Q4 2015</p> <p>3.3 Complete bidding and award contract by Q4 2017</p> <p>3.4 Purchase solid waste equipment by Q4 2016</p> <p>3.5 Construct dike by Q4 2017</p> <p>3.6 Construct storm water detention pond by Q4 2017</p> <p>3.7 Build roads by Q4 2018</p> <p>3.8 Carry out landscaping and slope protection works by Q4 2018</p> <p><b>4. Capacity development and institutional strengthening</b></p> <p>4.1 Recruit and mobilize project startup consultants by Q1 2014</p> <p>4.2 Recruit and mobilize project implementation consultants by Q4 2014</p> <p>4.3 Set up organization and arrangement by Q2 2014</p> <p>4.4 Establish and refine PPMS for CPG and implementing agencies by Q4 2014</p> <p>4.5 Finalize institutional coordination monitoring by Q3 2014</p>	<p><b>ADB: \$150.0 million</b></p> <p><b>Chuxiong Municipal Government: \$57.2 million</b></p> <p><b>Lufeng County Government: \$81.9 million</b></p> <p><b>Wuding County Government: \$ 36.6 million</b></p> <p><b>Domestic Bank: \$ 84.7 million</b></p>

Activities with Milestones	Inputs
4.6 Implement capacity building training by Q4 2018 4.7 Implement and monitor EMP, resettlement plans, REMDP, GAP, and SAP until Q2 2019	

ADB = Asian Development Bank, CPG = Chuxiong Yi autonomous prefecture government, EMP = environmental management plan, FCDI = financial charges during implementation, GAP = gender action plan, GDP = gross domestic product, km = kilometer, km<sup>2</sup> = square kilometer, m<sup>2</sup> = square meter, m<sup>3</sup> = cubic meter, PPMS = project performance management system, REMDP = resettlement and ethnic minority development plan, SAP = social action plan.

Source: Asian Development Bank.

## **a. Monitoring**

### **1. Project Performance Monitoring**

1. The project performance management system (PPMS) indicators, their relevance, and monitoring practicalities will be discussed with the executing agency, implementing agencies and project beneficiaries during project implementation. Disaggregated baseline data for output and outcome indicators gathered during project processing will be updated and reported quarterly through the semiannual progress reports of the project management office (CPPMO) and after each ADB review mission. These semiannual reports will provide information necessary to update ADB's project performance reporting system.<sup>1</sup> At the start of project implementation, the PMO and implementing agencies, with the project implementation consulting services, will develop integrated PPMS procedures to generate data systematically on the inputs and outputs of the components, as well as the indicators to be used to measure the project's impact and outcome taking into account the components' scope. The PMO will be responsible for monitoring and reporting on project performance. The basis for performance monitoring will be the design and monitoring framework (DMF), which identifies performance targets for the impact, outcomes, and outputs of the project. By collecting data from the sources identified in the DMF, the PMO will be able to report on an annual basis the performance of the project. Specific reporting requirements will be set out in the agreement between ADB and the Government. The PMO will collect the data, calculate the indicators, analyze the results, and prepare a brief report describing the extent to which the project is generating the intended outputs and outcomes, as well as the overall impact on the project municipalities. The relevance and practicability of data collection for indicators was confirmed with the PMO and the implementing agencies. Meanwhile, the agreed socioeconomic and environmental indicators to be used will be further enhanced to measure project impacts. The PMO and the implementing agencies agreed and confirmed that they will (i) refine and integrate the PPMS framework at the start of project implementation; (ii) confirm that targets are achievable; (iii) develop recording, monitoring, and reporting arrangements; and (iv) establish systems and procedures no later than six months after project inception.

### **2. Compliance Monitoring**

2. Chuxiong Yi Autonomous Prefecture Government (CPG), with assistance of three municipal and county governments, project implementing units (PIUs) and the project management consultants, will conduct compliance monitoring, submit reports and information to ADB concerning the use of the loan proceeds, project implementation, PIUs' project implementation performance, and compliance of loan and project covenants. These reports will include (i) quarterly progress reports on project implementation; and (ii) a project completion report, which should be submitted not later than three months after the completion of the project facilities. The compliance status of

<sup>1</sup> ADB's project performance reporting system is available at:  
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

loan and project covenants will be reported and assessed through quarterly progress report. ADB review missions will verify status.

### **3. Safeguards Monitoring**

#### **a. Environment**

3. **Internal monitoring and reporting by contractors.** During construction, contractors will be responsible for conducting internal environmental monitoring in accordance with the monitoring plan defined in the EMP (Attachment, Table EMP-7). Internal monitoring results will be reported through the contractors' monthly project progress reports to the local PMOs.

4. **Environmental impact monitoring by monitoring stations.** The PIUs will contract the local environmental monitoring stations (EMS) to conduct environmental impact monitoring in accordance with the monitoring plan defined in the EMP (Table EMP-7 and EMP-8). Monitoring will be conducted during construction and operation period, until a project completion report is issued. Quarterly monitoring reports will be prepared by the EMSs and submitted to CPPMO, local PMOs, and the PIUs.

5. **EMP implementation monitoring and progress reporting.** The project management consulting services will include environmental safeguard specialists to support EMP implementation and environmental monitoring by the loan implementation environment consultant (LIEC). The LIECs will review project progress and compliance with the EMP based on field visits, and the review of the environmental impact monitoring conducted by the EMSs. The findings of the LIECs will be reported to ADB through the semiannual EMP monitoring and progress reports. The results will be used to evaluate (i) the extent and severity of environmental impacts compared with the predicted impacts; (ii) performance of the environmental protection measures or compliance with related rules and regulations; (iii) impact trends; and (iv) the overall effectiveness of the EMP.

6. **External environment monitor.** An external environment monitor will be engaged by the CPPMO to conduct independent verification of the project's compliance with the EMP and relevant PRC regulations and standards. The external environment monitor will review all environment reports, including the quarterly environmental impact monitoring reports and the annual EMP monitoring and progress report, and prepare a concise annual EMP verification report. The report should confirm the project's compliance with the EMP and legislation standards of the People's Republic of China (PRC), identify any environment-related implementation issues, and recommend corrective actions.

7. **Project completion environmental audits.** Within three months after each subproject completion, or no later than one year with permission of the city or county environment protection bureaus, environmental acceptance monitoring and audit reports of each subproject completion shall be (i) prepared by a licensed environmental monitoring institute in accordance with the PRC's *Guideline on Project Completion Environmental Audit* (2001), (ii) reviewed for approval of the official commencement of individual subproject operation by environmental authorities, and (iii) finally reported to ADB through the semiannual EMP monitoring and progress reporting process.

#### **b. Resettlement and Indigenous Peoples**

8. Internal and external monitoring of resettlement plan implementation will be conducted. Monitoring methodologies are specified in the three resettlement plans, and resettlement and ethnic minority development plan (REMDP). Each implementing agency will carry out internal

supervision and monitoring to ensure compliance with the provisions of the resettlement plan. The PMO and implementing agencies have agreed to a set of supervision milestones with ADB, to ensure timely and effective implementation of resettlement activities. An independent agency under contract to each of three implementing agencies will implement external monitoring and evaluation. Semiannual external monitoring reports and annual evaluation reports will be forwarded directly to both the PMO and ADB.

#### **4. Gender and Social Action Plans**

9. Monitoring of the gender action plan (GAP) and social action plan (SAP) will be incorporated into the PPMS. Clear targets and indicators have been established and some indicators, such as those on employment, are also captured in the DMF. Assistance will be provided for the executing agency and implementing agencies by the resettlement and social development consultant who will help to set up effective monitoring systems and work with the focal points in the CPG and implementing agencies to ensure implementation of the GAP, and SAP.

##### **c. Evaluation**

10. ADB, CPG, and implementing agencies will undertake a semiannual review mission to evaluate the progress of project implementation. ADB, CPG, and implementing agencies will undertake a comprehensive midterm review two years after the start of project implementation to have a detailed evaluation of the scope, implementation arrangements, resettlement, achievement of scheduled targets, and progress on the agenda for policy reform and capacity building measures. Feedback from the PPMS activities will be analyzed. Within three months of physical completion of the project, the PMO will submit a project completion report to ADB.<sup>2</sup>

##### **d. Reporting**

11. The PMO will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within six months of physical completion of the project.

12. The executing agency and implementing agencies have agreed on the following reporting commitments: (i) submission of semiannual progress reports during project implementation; (ii) submission of semiannual reports on the progress of safeguards monitoring, i.e., resettlement activities, environment plan implementation, GAP, SAP, and REMDP implementation; (iii) submission of project completion report six months after completion of the project; and (iv) submission of audited project accounts and financial statements six months after the end of fiscal year. PPMS data will be incorporated in the semiannual progress reports.

13. The following table summarizes the key reporting requirements during project implementation.

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<sup>2</sup> Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

**Table 1: Key Reporting Requirements**

<b>Report</b>	<b>Reference</b>	<b>Timing of Reporting</b>
Project performance management system Develop comprehensive project performance management system procedures Reporting of baseline and progress data including environmental management plan	Project Agreement, Schedule, paragraphs	No later than 6 months after loan effectiveness  Semiannual, included in the quarterly project progress reports
Quarterly project progress reports	Project Agreement, Schedule, Article	Quarterly, within one month after the end of each quarter
Audited project accounts and financial statements auditor's report (including auditor's opinion on the use of the imprest account and statement of expenditures)	Project Agreement, Schedule, Article	Not later than six months after the closure of fiscal year (end of June)
Resettlement and ethnic minority monitoring Internal monitoring reports for the executing and implementing agencies Land acquisition and resettlement phase—external monitoring report Post-land acquisition and resettlement phase—external monitoring report  Resettlement completion report	Project Agreement, Schedule, paragraphs	Included in the semiannual project progress reports Semiannual  Annual reports for two years after the resettlement activities completion Within three months after project completion
Other social monitoring Reporting on gender action plan implementation Reporting on social action plan implementation	Project Agreement, Schedule, paragraphs	Semiannual, included in the quarterly project progress reports Semiannual, included the quarterly project progress reports
Environmental Report Construction phase—environmental management plan monitoring and progress report Construction phase—External environmental management plan verification report Operations Phase—External Monitoring report	Project Agreement, Schedule, paragraphs	Semiannual  Annual  Annual, until a project completion report is issued
Project completion report	Project Agreement, Schedule, Article	Not later than six months after the physical completion of the project

#### **e. Stakeholder Communication Strategy**

14. Project information will be communicated through public consultation, information disclosure mechanism in ADB's and government's website, meetings, interviews, focus group discussions, and community consultation meetings, in accordance with ADB's requirements of information disclosure policy.

15. **Environment.** Meaningful consultation for each subproject has been conducted during feasibility study and environmental impact assessment in accordance with the PRC Interim Guideline on Public Consultation in EIA (2006) and ADB's Safeguard Policy Statement (2009). During construction, the affected people will be consulted through formal questionnaire surveys and informal interviews by the environmental management unit of the local PMOs and the external environmental monitor. The project's environmental information shall be disclosed by the local EPBs and ADB as follows: (i) the project EIA is disclosed at [www.adb.org](http://www.adb.org); (ii) the Chinese EIAs are disclosed on the website of the Yunnan Province Environmental Protection Department; and (iii) the semiannual EMP progress and monitoring reports, as well as the annual EMP verification reports, will be disclosed at [www.adb.org](http://www.adb.org).

16. **Involuntary resettlement and indigenous peoples.** All of the affected households and towns/townships, leaders and town and township and district governments will be involved in the project impact and social-economic survey. Through meetings, interviews, focus group discussions, public consultation workshops, and community consultation meetings, local representatives have participated in the planning and concerns have been integrated into the three resettlement plans, and REMDP. Before implementation, the PMO and the implementing agencies will further discuss and consult with the affected persons' representatives the impacts on every town/township and the detailed compensation plan to ensure affected persons' interests are protected and to provide employment opportunities for the affected persons' livelihoods as a result of project implementation. The PMO and PIU in each implementing agency will disclose the resettlement plan in the offices as well as the community offices and to affected people in the local language. The resettlement plans will also be posted on the ADB website. Resettlement information booklets were distributed to affected households. This guideline contains information such as the affected project area, proposed land acquisition and relocation implementation progress and procedure, compensation standards for land acquisition, relocation assistance, and livelihood restoration strategy. The respective component implementing units will establish project resettlement units for supervision of implementation, continued public consultation, monitoring of progress, and response to grievances. The grievance redress procedures will be established and explanations have been included in the resettlement information booklets.

17. **GAP and SAP.** Public disclosure of all project documents will be undertaken through the implementing agencies and on the ADB website including the project data sheet, DMF, consolidated EIA, resettlement plans, and the report and recommendation of the President. Disclosure of social and environmental monitoring reports will be undertaken during project implementation.

18. Consultations with communities have taken place and will continue at different points in the preparation and implementation of the GAP and SAP within the components, and will be designed not only to inform people about the component or specific activities related to its preparation and implementation, but also to enable people in the community to ask questions, make suggestions, state preferences, and express concerns. Special attention will be paid to the participation of women and any other vulnerable groups, such as the poor.

## **X. ANTICORRUPTION POLICY**

1. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.<sup>1</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.<sup>2</sup>

2. To support these efforts, relevant provisions are included in the loan agreement, and the bidding documents for the project. ADB's Anticorruption Policy (1998, as amended to date) will be explained to and discussed with Chuxiong Yi Autonomous Prefecture Government (CPG), three municipal and county governments, their project management offices (PMOs), and project implementing units (PIUs). Consistent with its commitment to good governance, accountability and transparency, ADB reserves the right to investigate any alleged corrupt, fraudulent, collusive, or coercive practices relating to the project. To address the risks on governance and corruption related to procurement of civil works, relevant provisions of ADB's Anticorruption Policy will be included in the loan agreement and the bidding documents for the project. In particular, all contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of CPG, three municipal and county governments, PIUs and all contractors, suppliers, consultants, and other service providers as they relate to the project. CPG has indicated its commitment to promote good governance and establish a corruption-free environment under the project. Further to this, a number of good governance and anticorruption provisions have been included in the loan and project agreements.

3. CPG and three municipal and county governments will, and with their PMOs and PIUs to, comply with ADB's Anticorruption Policy (1998, amended from time to time). CPG agrees (i) that ADB reserves the right to investigate any alleged corrupt, fraudulent, collusive, or coercive practices relating to the project; and (ii) to cooperate fully with, and to require contractors and suppliers to cooperate fully with, any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, as may be necessary for the satisfactory completion of any such investigation.

4. CPG will (i) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; and (ii) ensure that all contracts financed by ADB in connection with the project include relevant provisions of ADB's Anticorruption Policy (1998, as amended to date) in all bidding documents for the project specifying the right of ADB to audit and examine the records and accounts of CPPMO and all the contractors, suppliers, consultants and other service providers as they relate to the project.

5. CPG and three municipal and county governments will also (i) involve the agencies responsible for oversight of each PIU in bidding and construction to enhance construction quality control and supervise effective work; (ii) introduce a dual-signing system in which each works contract winner also signs an anticorruption agreement with the employer; (iii) periodically inspect the contractors' activities related to fund withdrawals and settlements; (iv) require the project management consulting service to support PMOs and the PIUs to ensure good governance, accountability, and transparency in project operations; and (v) in consultation with relevant ministries at the central level, update rules and regulations on corporate governance and anticorruption to enhance the transparency of the operations of CPG, three municipal and county governments, and the PIUs.

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<sup>1</sup> Available at: <http://www.adb.org/sites/default/files/pub/1998/anticorruption.pdf>.

<sup>2</sup> ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>.

## **XI. ACCOUNTABILITY MECHANISM**

1. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, they should approach the Accountability Mechanism.<sup>1</sup>

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<sup>1</sup> For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.



## **XII. RECORD OF PAM CHANGES**

1. The PAM is a living document and is subject to change after ADB Board approval of the project's report and recommendation of the President. It is concise yet informative, providing checklists of all activities related to project implementation along with the necessary procedures for the project management office's to effectively implement and monitor the project.

<b>No.</b>	<b>Changes/Updates</b>	<b>Date</b>	<b>Remarks</b>
1	PAM initial draft agreed	4 July 2013	Agreed during the loan FF mission
2	Updated PAM agreed	11 December 2013	Agreed during the loan negotiation

## Attachment 1 - Environmental Management Plan (DRAFT)

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## A. Objectives

1. This Environmental Management Plan (EMP) was prepared by the environmental consultants of Asian Development Bank (ADB) Project Preparatory Technical Assistance (PPTA) 7891-PRC for the proposed **Yunnan Chuxiong Urban Environment Improvement Project** in conjunction with the domestic Environmental Impact Assessment (EIA) Institutes<sup>1</sup>, the design institute<sup>2</sup> and Chuxiong Project Management Office (CSPMO) based on the domestic EIA reports, soil erosion protection plans (SEPP), the feasibility study reports (FSRs), as well as the master plans of Chuxiong, Lufeng and Wuding, and other project documents. The EMP covers all project implementation phases, including design, pre-construction, construction, and operation.

2. The EMP defines appropriate mitigation measures for the anticipated environmental impacts, and defines the institutional responsibilities and mechanisms to monitor and ensure the compliance with PRC's environmental laws, standards and regulations, and ADB's Safeguard Policy Statement (SPS 2009). The EMP specifies (i) objectives; (ii) mitigation measures; (iii) implementing organization and responsibilities; (iv) inspection, monitoring, and reporting arrangements; (v) training and institutional strengthening; (v) a feedback and adjustment mechanism; and (vi) the grievance redress mechanism. The EMP will be reviewed and updated at the end of the detailed designs, as needed.

## B. Organizations and Their Responsibilities for EMP Implementation

3. The Chuxiong Yi Minority Autonomous State Government (CSG) is the **executive agency (EA)** of the project. The EA is responsible for communication with ADB, loan on-lending and repayment, as well as supervision and guidance of the CSPMO, LPMOs and the Project Implementation Units (PIUs) in three project city/counties during the project implementation.

4. At the state-level, CSG has established the **Chuxiong State Project Leading Group (CSPLG)** to provide policy guidance and coordination, and (ii) **Chuxiong State Project Management Office (CSPMO)** to supervise and coordinate overall project implementation.

5. The three participating city/county governments will be the **implementing agencies (IAs)**, and they have already established **local project management offices (LPMOs)** to supervise and coordinate overall implementation of subprojects in their respective cities.

6. Three **project implementing units (PIUs)** will physically implement the subprojects on behalf of respective IAs. The EMP implementation arrangements and responsibilities of governmental organizations are summarized in **Table EMP-1**.

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<sup>1</sup> Yunnan Provincial Environmental Science and Research Institute;

<sup>2</sup> Yunnan Institute of Architectural Design

Table EMP-1: Institutional responsibilities for EMP implementation

Project implementation organizations	Environmental Management Roles and Responsibilities
<b>Executing Agency (EA) – Chuxiong Yi Minority Autonomous State Government (CSG)</b>	<i>Overall policy and direction control. Responsible for project coordination with three project city/town's government, liaison with ADB, financial management and administration.</i>
<b>Chuxiong State Project Leading Group (CSPLG)</b>	<i>Responsible for implementation of the entire project. Headed by the Vice Mayor and consists of DRC, FB, EPB, HURDB, TB, LRB, and PB:</i> <ul style="list-style-type: none"> <li>• Coordinate and overlook project preparation and implementation;</li> <li>• Provide policy guidance during implementation;</li> <li>• Facilitate interagency coordination and coordination.</li> </ul>
<b>ADB Chuxiong State Project Management Office (CSPMO)</b>	<i>Supervision and overall management to ensure smooth implementation of the Project:</i> <ul style="list-style-type: none"> <li>• Responsible for all day-to-day management work during the project preparation and implementation period;</li> <li>• Assign one environment specialist as EMP coordinator;</li> <li>• Communicate and coordinate with ADB for project management and implementation; report the project implementation progress and compliance monitoring to ADB;</li> <li>• Submit bidding documents, bid evaluation reports and other necessary documentations to ADB for necessary approval</li> <li>• Engage project management consulting service</li> <li>• Procurement of project implementation consultant services (PIC), including loan implementation environmental consultant (LIEC) to assist in supervision, tracking and reporting on EMP implementation of all subprojects;</li> <li>• Procurement of external environment monitor (EEM);</li> <li>• Packaging of environmental monitoring reports prepared by the LPMOs and submission of them to ADB;</li> </ul>
<b>Implementing Agencies (IAs) - Governments of Chuxiong Municipality, Lufeng County, and Wuding County</b>	<i>Primarily responsible for project implementation for project components in their jurisdiction, including finance and administration, technical and procurement matters, monitoring and evaluation, and safeguard compliance. Day-to-day activities delegated to LPMOs (see below)</i>
<b>Local Project Leading Groups (LPLGs)</b>	<ul style="list-style-type: none"> <li>• <i>Coordinate and overlook project preparation and implementation:</i></li> <li>• <i>Provide policy guidance during implementation:</i></li> <li>• <i>Facilitate interagency coordination and coordination.</i></li> </ul>
<b>Local Project Management Offices (LPMOs), established under IAs</b>	<i>Responsible for all day-to-day management work during the project preparation and implementation period.</i> <ul style="list-style-type: none"> <li>• Communicate and coordinate with CSPMO for project management and implementation;</li> <li>• Establish environment management unit (EMU);</li> <li>• In conjunction with PIUs, incorporation of EMP into bidding documents;</li> <li>• Establishment of a Grievance Redress Mechanism (GRM) with a dedicated Project Complaints Coordinating Unit (PCCU).</li> <li>• Supervision and monitoring of the EMP implementation and semi-annual reporting to the CSPMO (with support of LIEC);</li> <li>• Participation in capacity building and training programs;</li> </ul>

Project implementation organizations	Environmental Management Roles and Responsibilities
<b>Project Implementing Units (PIU)</b> - Chuxiong Development and Investment Company Limited (CDIC) - Lufeng Urban Construction and Investment Company (LUCIC) - Wuding Urban Construction and Investment Company (WUCIC)	<i>Ensuring successful implementation of the relevant subproject components</i> <ul style="list-style-type: none"> <li>• Appoint one environment specialist as EMP coordinator;</li> <li>• Tendering contractors and equipment with assistance of the international tendering agency;</li> <li>• Administer and monitor contractors and suppliers;</li> <li>• Construction supervision and quality control</li> <li>• Contracting of local environment monitoring stations (EMS) to conduct environment impact monitoring;</li> <li>• Procurement and management of construction supervision companies (CSC) required for subproject implementation in accordance with People's Republic of China (PRC) and ADB procedures and regulations;</li> <li>• Participation in capacity building and training programs;</li> <li>• Commissioning of the constructed facilities.</li> </ul>
<b>Facility Operators</b> - Water Resource Bureaus; - Urban Management Bureaus; - Transport Management Bureaus; - Traffic Police.	<i>Ensuring successful ongoing operation and maintenance of the relevant subproject components:</i> <ul style="list-style-type: none"> <li>• In conjunction with PIUs, commissioning of the constructed facilities</li> <li>• O&amp;M of completed facilities, including environmental management, monitoring and reporting responsibilities.</li> </ul>

7. **Environment staff within LPMOs, CSPMO and PIUs.** The LPMOs will have main EMP coordination responsibility. Therefore, each LPMO will establish an environmental management unit (EMU) and designate a leader and an appropriate number of staff to coordinate environmental issues associated with each component, subcomponent and contract package. The EMUs will take charge of (i) coordinating the implementation of the EMP and developing implementation details; (ii) supervising the implementation of mitigation measures during project construction and operation; (iii) ensuring that environmental management, monitoring, and mitigation measures are incorporated into bidding documents, construction contracts and operation management plans; (iv) submitting semi-annual EMP monitoring and progress reports to the CSPMO; (v) coordinating the local grievance redress mechanism (GRM); and (vi) responding to any unforeseen adverse impact beyond those mentioned in the domestic EIAs, the project EIA and the EMP. The EMUs will be technically supported by the loan implementation environment consultants (LIECs). The CSPMO and the PIUs will nominate one staff to act as environmental coordinator to check the overall implementation of environmental management provisions of the EMP.

8. **Loan Implementation Environment Consultant.** A LIEC will be hired under the project implementation consultant services (PIC). The LIEC will advise the CSPMO, LPMOs, PIUs, contractors and CSCs on all aspects of environmental management and monitoring for the project. The LIEC will (i) assist in updating the EMP and environmental monitoring program, as needed; (ii) supervise the implementation of the mitigation measures specified in the EMP; (iii) on behalf of the LPMOs and CSPMO, prepare the semi-annual EMP monitoring and progress reports in English; (iv) provide training to the CSPMO, LPMOs, PIUs, CSCs, on the PRC's environmental laws,

regulations and policies, ADB SPS 2009, EMP implementation, and GRM, etc in accordance with the tentative training plan defined in **Table EMP-9**; (v) identify any environment-related implementation issues, and propose necessary corrective actions; (vi) undertake site visits as required.

9. **Construction Contractors.** Construction contractors will be responsible for implementing relevant mitigation measures and internal monitoring during construction under the supervision of the CSCs and PIUs. Construction contractors will also be responsible for conducting internal environmental monitoring. The contractors may contract local environmental monitoring stations (EMS) to conduct internal environment impact monitoring during construction.

10. **Construction Supervision Companies (CSCs).** CSCs will be selected through the PRC bidding procedure by the PIUs. The CSCs will be responsible for supervising construction progress and quality, and EMP implementation on construction sites. Each CSC shall have at least one environmental engineer on each construction site to: (i) supervise the contractor's EMP implementation performance; and (ii) prepare the contractor's environmental management performance section in monthly project progress reports submitted to the PIUs and LPMOs.

11. **Environmental Monitoring Stations (EMS).** The IAs will appoint the EMS of each project city/county to conduct periodic environmental impact monitoring during construction and operation in accordance with the environmental impact monitoring plan (**Table EMP-7** and **Table EMP-8**).

12. **External environment monitor (EEM).** The EA will engage an independent, external environment monitor to examine and verify the project's environmental performance by: (i) conducting independent verification of the project's environmental management performance, including identification of any environment-related implementation issues and environment management plan (EMP) compliance issues; (ii) reviewing environmental impact monitoring results of the local environmental monitoring stations, and EMP monitoring and progress reports prepared by LPMOs and CSPMO, comparing predicted with actual environmental impacts, assessing the effectiveness of the mitigation measures, and suggesting enhancement measures, as required; (iii) providing advice to CSPMO, LPMOs and PIUs on required corrective actions; and (iv) submitting EMP implementation compliance verification reports to CSPMO, LPMOs, PIUs (in Chinese) and ADB (in English) on annual basis during project implementation period.

## C. Potential Impacts and Mitigation Measures

13. **Table EMP-2 to EMP-5** list the anticipated impacts of the project components in the three project cities/counties during project preparation, implementation and operation as identified by the domestic EIAs and the project EIA, as well as corresponding mitigation measures defined to minimize those impacts. The mitigation measures will be incorporated into detailed design, bidding documents, construction contracts and operational management manuals, which will mainly be implemented by the design institutes (during detailed design) and contractors (during construction), under the supervision of CSCs, LPMOs and PIUs, with technical support from the LIECs. The effectiveness of these measures will be evaluated based on environmental inspections and monitoring to determine whether they should be continued, improved or adjusted.

**Table EMP-2: Potential Impacts and Mitigation Measures during Preconstruction and Construction Phases**

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
A. Design & Preconstruction Phases									
Detail design stage	Establishment of env. units at different levels of supervision	<ul style="list-style-type: none"><li>Establish an EMU in each of the LPMOs, including at least one environment specialist</li><li>Appoint environmental coordinators for EMP coordination within CSPMO and PIUs</li></ul>	LPMOs, CSPMO, PIUs	EA, ADB	-		-	-	Counterpart funds (EA, IAs, PIUs)
	Updating EMP	<ul style="list-style-type: none"><li>Update mitigation measures defined in this EMP based on final detailed design, as needed, submit to ADB for disclosure.</li><li>In case of major change of project location (or additional physical component) that may cause substantial environmental impacts or involve additional affected people, IAs and PMOs should form an EIA team to conduct additional environmental assessment and also public consultation. The revised EIA reports should be submitted to relevant EPB and ADB for approval and disclosure. To determine whether the change is minor or major, City PMOs should consult with ADB.</li></ul>	LPMOs, EMU, TA consultant	EEM, EPBs, ADB	-	-	-	-	Included in LPMOs' operation budget
	Confirmation of land acquisition and resettlement	<ul style="list-style-type: none"><li>Update LARP after detail design</li></ul>	DIs	BCA <sup>3</sup> ; BLM <sup>4</sup>	-	-	-	-	Included in resettlement budget
Construction Preparation	Environmental monitoring stations	<ul style="list-style-type: none"><li>Prior to construction, engage EMS<sup>5</sup>.</li><li>Prepare a detailed environmental monitoring plan in accordance to monitoring plan defined in this EMP.</li></ul>	PIUs, EMSs	LPMOs, CSPMO, ADB	25	15	35	30	Counterpart funds (IAs)
	Project Implementation Consultant Services (PIC)	<ul style="list-style-type: none"><li>Engage loan implementation environmental consultant (LIEC)</li></ul>	CPMO, City/county PIUs	ADB	-	-	-	-	Included in PIC budget (CSPMO)

<sup>3</sup> Bureau of Civil Affairs<sup>4</sup> Project City/counties' Bureau of Land Management<sup>5</sup> Environmental Monitoring Station of each project city/county, which is the only licensed environmental monitoring units

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
	External environment monitor (EEM)	● Engage external environment monitor (EEM) to verify the project environmental performance and compliance with the EMP	EA, CSPMO	ADB	9.0	8.0	17.0	17.0	Counterpart funds (EA)
	Bidding and contract documents	● Prepare environment section in the terms of reference for bidders; ● Prepare environmental contract clauses for contractors, namely the special conditions (e.g., reference to EMP and monitoring table).	LDIs, LPMOs, PIUs	Start-up Project Management Support, CSPMO,	-	-	-	-	Included in Detail design stage
	EMP training <sup>6</sup>	● PIC, LIEC, or invited environment specialists and/or officials from the provincial EPB and the Prefecture EPB provide training on construction environmental management and implementation and supervision of environmental mitigation measures to contractors and CSCs, in accordance with tentative training plan defined in this EMP.	PIC&LIEC <sup>7</sup> ,	CSPMO, LPMOs, ADB	5.0	3.0	5.0	5.0	Included in the PIC budget
	Establish operational GRM	● Establish a Project Public Complaints Unit (PPCU) in each LPMO; provide training for PPCU members and GRM access points; ● Disclose the PPCU's phone number, fax, address, and email to the public on City EPB's website and on information boards at each construction site.	LPMOs, PIUs	CSPMO, LIEC, ADB	-	-	-	-	Included in LPMO's operation budget
	Land acquisition and resettlement	● Establish a resettlement office comprising local government officials to manage the land acquisition and resettlement process; ● Conduct information dissemination and community consultation programs in accordance with the PRC Land Administration Law (1999) and ADB SPS (2009); ● Ensure that all resettlement activities are reasonably completed before construction	PIUs, City/county LAROs <sup>8</sup> ,	EA, City/county LBs, BCAs	-	-	-	-	Included in the cities' Land Acquisition and Resettlement

<sup>6</sup> Environmental management<sup>7</sup> Loan Implementation Environmental Consultant<sup>8</sup> City/county Land Acquisition and Resettlement Office



Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		starts on any component.							
Contr. Obligation prior to construction	Construction site EMP	<ul style="list-style-type: none"> <li>Each civil works contractor shall prepare a Construction-site EMP (CS-EMP), based on this EMP, which shall include the following plans:               <ul style="list-style-type: none"> <li>- Site drainage and soil erosion protection;</li> <li>- Spill control and management;</li> <li>- Environmental, health and safety management plan (EHSMP);</li> <li>- Surface water protection;</li> <li>- Temporary traffic management;</li> <li>- Construction site access control;</li> </ul> </li> <li>These plans are further elaborated below (construction phase)</li> </ul>	Civil works contractors	LPMOs, PIUs, LIEC, EEM	-	-	-	-	Included in civil works contracts
TOTAL					39.0	26.0	57.0	52.0	
B. Construction Phase									
Soil & Geology	Soil erosion, soil contamination	<ul style="list-style-type: none"> <li>Develop and implement a <b>Site Drainage and Soil Erosion Management Plan</b> that responds to the SEPP approved by local Water Resources Bureau, and the project EIA. Measures shall include the following:               <ul style="list-style-type: none"> <li>- During road and bridge constructions, maintain slope stability at cut faces by implementing erosion protection measures such as terraces and silt barriers;</li> <li>- Stabilize all cut slopes, embankments, and other erosion-prone working areas while works are going on;</li> <li>- All earthwork disturbance areas must be stabilized within 30 days after earthworks have ceased at the sites;</li> <li>- Minimize active open excavation areas during trenching activities and use appropriate compaction techniques for pipe</li> </ul> </li> </ul>	Contractors, CSCs	PIUs, EPBs, WRBs, LIEC, EEM	145.81 <sub>9</sub>	180.86	240.03	236.88	Included in construction contract

<sup>9</sup> Source of the budget: domestic EIA Report

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		<p>trenches construction;</p> <ul style="list-style-type: none"><li>- Provide temporary detention ponds or containment to control silt runoff;</li><li>- Construct intercepting ditches and drains to prevent runoff entering construction sites, and divert runoff from sites to existing drainage;</li><li>- Strip and stockpile topsoil, cover or seed temporary soil stockpiles;</li><li>- Limit construction and material handling during periods of rains and high winds;</li><li>- Properly slope or re-vegetate disturbed surfaces, such as compacted pipeline trenches and cut banks;</li><li>- Protect slopes on both sides of bridges and culverts;</li><li>- Plant grass to protect slopes, especially on sandy soil and terraced slopes;</li><li>- Appropriately set up temporary construction camps and storage areas to minimize the land area required and impact on soil erosion;</li></ul> <p>● Implement the following measures to avoid <b>soil contamination</b>:</p> <ul style="list-style-type: none"><li>- Properly store petroleum products, hazardous materials and wastes on impermeable surfaces in secured and covered areas, and use the best management practice to avoid soil contamination;</li><li>- Remove all construction wastes from the site to approved waste disposal sites;</li><li>- Establish emergency preparedness and response plan (Spill Management Plan); and</li><li>- Provide spill cleanup measures and equipment at each construction site and require contractors to conduct training in emergency spill response procedures.</li></ul>							

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
	Earthwork, spoil disposal site management and rehabilitation	<ul style="list-style-type: none"><li>● For Chuxiong, the surplus earth of 79,857m<sup>3</sup> shall be used for filling the planned landscaping area between Qinglong River bank and the roads of No.15 and 16, where about 0.9million m<sup>3</sup> filling earth will be needed;</li><li>● For Wuding, the surplus earth of 250,824m<sup>3</sup> shall be transported to the northwest part of the county town for filling the real estate construction site, where about 0.15million m3 of earth will be used;</li><li>● For Lufeng, the surplus earth of 40,500m<sup>3</sup> shall be used for filling the landscaping area on the river banks, where about 0.5million m<sup>3</sup> filling soil will be used;</li><li>● Topsoil of 45,591m<sup>3</sup> will be used for planting trees, bushes and grass in the landscaping areas in Chuxiong and Wuding, respectively.</li><li>● Transport remaining construction spoil to approved spoil disposal sites defined in Table V.4 of this EIA.</li></ul>	Contractors, CSCs	LPMOs, PIUs, EPBs, LIEC, EEM	6.0	6.0	5.0	8.5	Included in construction contract
Surface water quality, hydrology	Impact on river hydrology by bridge construction	<ul style="list-style-type: none"><li>● River bridge pier constructions (13 bridges) shall be conducted during the dry season; construction during the rainy season will be prohibited;</li><li>● Foundation treatment and pier grouting come first in pier construction; and</li><li>● Provide adequate opening for flood flow before the rainy season.</li></ul>	Contractors, CSCs	City/county PIUs, LIEC, EPBs, WRB	14.0	17.0	18.0	19.0	Included in construction contract
	Impact on river hydrology by river rehabilitation works	<ul style="list-style-type: none"><li>● Cofferdam diversion will be set along the proposed rivers; and</li><li>● River bank constructions shall be conducted during the dry season (from November to next March), and construction during the rainy season shall be prohibited.</li></ul>							
	Surface and groundwater pollution	<ul style="list-style-type: none"><li>● Contractors will be requested to implement the following measures to protect surface and groundwater resources (to be defined in their CS-EMPs):</li></ul>							

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		<ul style="list-style-type: none"><li>- During bridge and river bank constructions, pump slurry to shore and properly dispose cutting materials;</li><li>- Install sediment traps along the rivers to minimize sediment runoff into the rivers during earthworks;</li><li>- Works on the river bed, including sediment dredging, shall not be conducted without prior assessment of environmental impacts, and dredged material management planning;</li><li>- Develop contingency plans for control of oil and other dangerous substances (Spill Management Plan);</li><li>- Collect wastewater from construction activities in sedimentation tanks, retention ponds, and filter tanks to remove silts and oil;</li><li>- Equip all areas where construction equipment is being washed with water collection basins and sediment traps;</li><li>- Station fuel storage, maintenance shop and vehicle cleaning areas at least 500m away from the nearest water body;</li><li>- Locate storage facilities for fuels, oil, and other hazardous materials within secured areas on impermeable surfaces, and provided with bunds and cleanup installations;</li><li>- Ensure that fuel suppliers are properly licensed. They shall follow proper protocol for transferring fuel and the PRC standard of JT3145-88 (Transportation, Loading and Unloading of Dangerous or Harmful Goods);</li><li>- Locate labor camps at least 500m from ecologically sensitive receivers, such as rivers, residential areas and natural ponds, etc.;</li><li>- Install eco-toilets and septic treatment and disposal systems at construction camps along with proper maintenance protocols;</li></ul>							

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		<ul style="list-style-type: none"><li>- The discharge of construction wastewater to the rivers will be prohibited;</li><li>- Conduct water quality monitoring in the rivers and the natural ponds during construction in accordance with the EMP monitoring program to identify and confirm results of the impact assessment and effectiveness of adopted mitigation measures.</li></ul>							
Ambient Air	Dust generated by construction activities	<ul style="list-style-type: none"><li>● Spray water daily on construction sites and earth/material handling routes where fugitive dust is being generated;</li><li>● Pay particular attention to dust suppression near sensitive receptors such as schools, hospitals and residential areas; and</li><li>● Cover materials during truck transportation, in particular, the fine material, to avoid spillage or dust generation.</li></ul>	Contractors, CSCs	LPMOs, PIUs, LIEC, EEM	7.0	7.0	12.0	10.0	Included in construction contract
	Air emission from asphalt pavement, and vehicles and machinery	<ul style="list-style-type: none"><li>● Locate asphalt plants and mixers as far away as possible (at least 500 m downwind) from the nearest residential areas, and other sensitive receptors;</li><li>● Store petroleum or other harmful materials in appropriate places and covering to minimize emission;</li><li>● Maintain vehicles and construction machinery regularly to a high standard of efficient running and fuel-burning to ensure emissions from vehicle and construction machineries are in compliance with the PRC standards of GB18352-2005, GB17691-2005, GB11340-2005, GB2847-2005, and GB18285 -2005; and</li><li>● Initiate a regular inspection and certification system for vehicle and equipment emission.</li></ul>							
Noise	Noise generated from	<ul style="list-style-type: none"><li>● Ensure that noise levels from equipment and machinery conform to the PRC standard of GB12523-90, and properly maintain</li></ul>	Contractors, CSCs	LPMOs, PIUs, LIEC, EEM	21.7	1.5	36.04	13.9	Included in construction contract

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
	construction activities	<p>construction vehicles and machineries to minimize noise;</p> <ul style="list-style-type: none"><li>● Apply noise reduction devices or methods where piling equipment is operating within 300m of sensitive sites such as schools, hospitals and residential areas;</li><li>● Locate sites for rock crushing, concrete-mixing, and similar activities at least 1 km away from sensitive areas;</li><li>● To reduce noise at night, restrict the operation of machinery generating high levels of noise, such as piling, and movement of heavy vehicles along urban and village roads between 20:00 and 06:00 the next day in accordance with PRC regulations;</li><li>● Take special caution at construction sites that are close to such sensitive sites as schools, hospitals and office buildings. When construction activities are unavoidable during the school seasons, the use of heavy equipment will be restricted to weekends and non-class hours.</li><li>● Place temporary hoardings or noise barriers around noise sources during construction, if necessary;</li><li>● Monitor noise at sensitive areas at regular intervals (refer to the monitoring plan in the EMP). If noise standards are exceeded, equipment and construction conditions shall be checked, and mitigation measures shall be implemented to rectify the situation; and</li><li>● Conduct monthly interviews with residents living adjacent to construction sites to identify community complaints about noise, and seek suggestions from community members to reduce noise annoyance. Community suggestions will be used to adjust work hours of noise-generating machinery.</li></ul>							
	Noise impacts on the first	<ul style="list-style-type: none"><li>● Erect temporary noise barriers around noise sources during construction to comply with</li></ul>	Contractor, CSC,	LPMO, PIU and EPB,	--				Included in construction

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
	section <sup>10</sup> of Longchuan River in Chuxiong City	Class I <sup>11</sup> (55 dB(A) day-time; 45 dB(A) night-time) of the PRC Ambient Noise Standard (GB 3096-2008); ● Prohibit construction activities during the night;	nearby villages	LIEC, EEM					contract
Vibration	Vibration generated by piling	● Piling and compaction operations at night are prohibited.	Contractors, CSCs	LPMOs, PIUs, LIEC, EEM	-	-	-	-	-
Solid Waste	Solid waste generated by construction activities and from workers' camps	● Provide appropriate waste collection and storage containers at locations away from surface water or sensitive receivers; ● Reach agreement with municipal waste collection services for regular collection of waste prior to construction; ● Properly remove and dispose of any significant residual materials, wastes and contaminated soils that remain on the ground timely during and after construction to designated sites. Any planned paving or vegetating of the area shall be done as soon as the materials are removed to protect and stabilize the soil; ● Burning of waste is strictly prohibited. ● Provide sufficient garbage bins at strategic locations and ensure that they are protected from birds and vermin, and emptied regularly (using the municipal solid waste collection systems).	Contractors, CSCs	PIUs, LIEC, EEM	56.0	56.0	56.0	56.0	Included in construction contract
Flora and Fauna	Protection of vegetation, and fauna	● Protect existing vegetation nearby construction sites; ● Properly backfill, compact and re-vegetate pipeline trenches after pipeline installation; ● Protect existing trees and grassland during road, bridge, river rehabilitation and pipeline constructions; where a tree has to be removed or an area of grassland disturbed.	Contractor, CSCs	PIUs, LIEC, EEM	36.45	45.21	53.18	29.04	Included in construction contract

<sup>10</sup> The section (4500m in length) has some ecological value (vegetation, fish, ducks); other downstream section lost ecological value (seasonal stream)

<sup>11</sup> For the first section of Longchuan River in Chuxiong City

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		replant trees and re-vegetate the area immediately after construction; ● Remove trees or shrubs only as a last resort if they impinge directly on permanent works or approved necessary temporary works; ● In compliance with the PRC's forestry law, undertake compensatory planting of an equivalent or larger area of affected trees and vegetation; and ● Use native plant species of local provenance will for replanting; ● Take special precautions during and after construction for the protection of small animals, reptiles, and birds of common species that live in the vegetated roadside and riverside areas, medians, inner areas of bridges, and green areas							
	Protection of flora and fauna (first section of Longchuan River)	● The river rehabilitation shall be limited to the existing river embankment repairs, tree planting to stabilize the exiting riverbank, water channel sediment removal. The existing waterway channel, tree line and vegetation will be preserved;	DI, Contractor, CSCs	LPMO, FB and EPB, LIEC, EEM	-	-	-	-	Included in detail design
Socio-economic impacts	Impact on physical cultural resources	● Contractors shall establish chance-find procedures for physical cultural resources; ● If a new site is unearthed, work shall be stopped immediately and local BCR and the LPMO promptly notified, and construction will resume only after thorough investigation and with the permission of the appropriate authority.	Contractors, CSCs	LPMO,, LIEC, City BCR <sup>12</sup> , EEM	12.8	12.8	12.4	80.4	Included in construction contract
	Community health and safety	● The civil work contractors shall implement the following measures to ensure community health and safety during construction: - Develop and implement <b>temporary traffic control and operation plan</b> , to be cleared by local traffic management administrations							

<sup>12</sup> Bureau of Cultural Relics



Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		<p>before construction. The plan shall include provisions for diverting or scheduling construction traffic to avoid morning and afternoon peak traffic hours, regulating traffic at road crossings, selecting transport routes to reduce disturbance to regular traffic, reinstating roads, and opening them to traffic as soon as the construction is completed;</p> <p>- <b>Conduct underground facilities survey and protection</b> to avoid disturbances to utility services, where needed.</p> <p>- <b>Disclose information</b> to residents and businesses in advance through media of the construction activities, given the dates and duration of expected disruption;</p> <p>- <b>Ensure that construction sites are well protected</b> but placing clear signs at construction sites in view of the public, warning people of potential dangers such as moving vehicles, hazardous materials, excavations etc., and raising awareness on safety issues. All sites shall be secured, disabling access by members of the public through appropriate fencing whenever appropriate.</p>							
	Occupational. health and safety	<ul style="list-style-type: none"><li>● Each civil works contractor shall develop and implement an <b>environmental, health and safety management plan (EHSMP)</b> which shall include the following provisions:<ul style="list-style-type: none"><li>- Provide a clean and sufficient supply of fresh water, for construction sites and for all camps, offices and workshops;</li><li>- Provide an adequate number of latrines and other sanitary arrangements at construction sites and work camps, and ensure that they are cleaned and maintained in a hygienic state;</li><li>- Garbage receptacles at construction site and camps will be setup, which will be periodically cleared to prevent outbreak of</li></ul></li></ul>	Contractors	CSCs, LPMOs, LBs, EPBs, LIEC, EEM	46.0	46.0	110.8	106.8	Included in construction contract

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget of Component (10,000 CNY)				Source of Funds
			Who Implements	Who Supervise	Chuxiong		Lufeng River & Infra.	Wuding River & Infra.	
					Infra.	River			
		<p>diseases;</p> <ul style="list-style-type: none"> <li>- Provide personal protection equipment, such as safety boots, helmets, gloves, protective clothing, goggles, and ear protection, in accordance with relevant health and safety regulations for workers;</li> <li>- An emergency response plan to take actions on accidents and emergencies will be prepared, including environmental and public health emergencies associated with hazardous material spills and similar events, and submitted to the local EPBs for review and appraisal. Emergency phone link with hospitals in the three project towns will be established. A fully equipped first-aid base in each construction camp will be organized;</li> <li>- A records management system that will store and maintain easily retrievable records protected against loss or damage will be established. It will include documenting and reporting occupational accidents, diseases, and incidents. The records will be reviewed during compliance monitoring and audits;</li> <li>- Ensure that occupational health and safety matters are given a high degree of publicity to all persons regularly or occasionally on each construction site. Posters will be displayed prominently in relevant areas of the site; and</li> <li>- Train all construction workers in basic sanitation, general health and safety matters, and on the specific hazards of their work. Implement SITs/HIV/AIDS and other communicable diseases awareness and prevention program to target the local community and construction workers.</li> </ul>							
TOTAL					345.76	372.37	543.45	560.52	

Source: Domestic EIAs and FSRs, PPTA Consultant's Report, and consultations with city EPBs, WCBs, FBs and other government divisions.

Table EMP-3: Potential Impacts and Mitigation Measures during Operation for Infrastructure Components

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Wuding	Lufeng		
<b>Ambient Air</b>	Excessive vehicle emissions, affecting ambient air quality	<ul style="list-style-type: none"> <li>● Conduct periodic examination of emission of vehicle exhaust pollutants for each vehicle in accordance with PRC regulation (such as GB18352.3-2005);</li> <li>● Refuse registration to vehicles with excessive emissions; and</li> <li>● Conduct air quality monitoring (through EMS) in accordance with the monitoring program until a PCR is issued.</li> </ul>	UMB <sup>13</sup> , TMB <sup>14</sup> , EMSs <sup>15</sup>	City/county EPBs, CSPMO	3.6/a	3.6/a	2.5/a	UMBs' operation budget	NO <sub>2</sub> , CO, TSP, SO <sub>2</sub> (GB3095-1996 until 31/12/2015; GB 3095-2012 after 01/01/2016)
<b>Acoustic Environment</b>	Traffic noise along project roads, expecting to exceed standard at 166 households (prediction for 2015).	<ul style="list-style-type: none"> <li>● Plant trees and shrubs along the proposed roadsides after construction;</li> <li>● Install double-glazed windows for 166 hh in the three project cities in accordance with the plan defined in the EIA and domestic EIAs.</li> </ul>	Contractors	PIUs, LIEC, EEM	58.0	12.0	55.0	Included in civil works contracts	Number of trees planted, area of vegetation (m2) Number and m2 of double-glazed windows installed.
		<ul style="list-style-type: none"> <li>● Conduct ambient noise monitoring, determine whether mitigation measures will be required for sites where noise levels are expected to exceed by more than 3 dB(A);</li> </ul>	IAs (through EMSs)	LEPBs	10.0/a	6.0/a	6.0/a	UMBs' operation and maintenance budget	GB 3096-2008 Class II
<b>Surface &amp; Ground Water</b>	Pollution from storm water runoff and solid waste	<ul style="list-style-type: none"> <li>● Routinely collect and properly dispose litter and debris from sidewalks, driveways, and parking lots, especially near rivers;</li> <li>● Install litter traps along waterways (small floating mesh traps attached to one</li> </ul>	IAs, UMB, EMSs	LEPBs, WRBs	20.0/a	20.0/a	20.0/a	UMBs' operation budget	SS, COD, Petroleum (GB3838-2002) (GB/T14848-1993)

<sup>13</sup> After one year operation, the proposed transport facilities will be transferred to Urban Management Bureaus (UMB) of the IAs

<sup>14</sup> Traffic Management Bureau

<sup>15</sup> Environmental Monitoring Station

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Wuding	Lufeng		
		bank) and regularly empty these; <ul style="list-style-type: none"> <li>● Clean the roadside catch basins before rainy season to avoid surface water pollution by storm water runoff flushing debris and silt;</li> <li>● Place garbage bins and containers along the road networks;</li> <li>● Maintain storm-water retention and pre-treatment systems along the roads nearby the rivers.</li> </ul>							
	Sewers, wastewater collection and treatment	<ul style="list-style-type: none"> <li>● Regularly inspect and maintain project sewers;</li> <li>● Review performance of linked WWTP<sup>16</sup>s in the project cities (treatment performance, compliance with effluent standards)</li> </ul>	WWTP Operators, City/county EMSs, PIUs	LEPBs	5.0/a	3.0/a	3.0/a	UMBs' operation budget	SS, COD, BOD, Petroleum (GB 18018-2002)
<b>Health and Safety</b>	Traffic safety, ITS system	<ul style="list-style-type: none"> <li>● Implementation of road safety and transport planning assessment and training: <ul style="list-style-type: none"> <li>- conduct traffic safety audit for the project city/towns;</li> <li>- identify safety concerns in traffic safety feature implementation, traffic safety education and enforcement needs,</li> <li>- develop program for public safety education and safety awareness.</li> </ul> </li> <li>● Implementation of ITS, include traffic monitoring system, red light and</li> </ul>	CSPMO, PIC, IAs, Traffic Police	City/county EPBs, TMB, PSB <sup>17</sup>	10.0	10.0	10.0	Capacity building budget of the loan	Training course satisfaction survey, assessment report with recomm.

<sup>16</sup> Wastewater treatment plant

<sup>17</sup> Public Security Bureau

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Wuding	Lufeng		
		speeding violation monitoring system, real time traffic condition displays							
	Spills of dangerous goods	<ul style="list-style-type: none"> <li>● Ensure that all trucks carrying hazardous materials are marked according to PRC norms;</li> <li>● Enforce traffic controls, and set speed limits for trucks carrying hazardous material;</li> <li>● Prepare a rapid spill response and clean up protocol so that in the event of a spill the appropriate people and equipment are quickly notified and action can be taken.</li> </ul>	UMB, Local Traffic Police	IAs, LEPBs, PSB <sup>18</sup>	10.0/a	10.0/a	10.0/a	UMBs' operation budget	Presence of rapid spill response protocol
<b>Flora</b>	Vegetation	<ul style="list-style-type: none"> <li>● Routinely inspect and properly maintain all roadside trees, slope stabilization sites, and landscaping vegetation. Keep at least 98% of survival rate.</li> </ul>	PIUs, UMBs	LEPBs	5.0/a	3.0/a	3.0/a	UMBs' operation and maintenance budget	Survival rate of roadside vegetation (%)
<b>Soil</b>	Soil erosion	<ul style="list-style-type: none"> <li>● Inspect and properly maintain erosion protection measures including seeded or stabilized slopes, drainage structures and retaining walls at least twice during the first year of the roads' operation to ensure that they are maintained properly and are functioning as designed.</li> </ul>	PIUs, UMBs	LEPBs, WRBs	4.0/a	2.5/a	2.5/a	UMBs' operation and maintenance budget	Marks (0-100) given by inspection expert team.
<b>Natural Hazard</b>	Reduced flood discharge capacity as result of accumulation	<ul style="list-style-type: none"> <li>● Clean culverts, bridge piers, and drainage pipes before rainy season;</li> </ul>	UMBs	City/county LEPBs, WRBs	10.0/a	7.0/a	6.0/a	UMBs' operation and maintenance budget	Annual EMR

<sup>18</sup> ibid

Item	Potential Impacts and Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Wuding	Lufeng		
	of debris.								
<b>TOTAL</b>		<b>One time investment</b>			<b>68.0</b>	<b>22.0</b>	<b>65.0</b>		
		<b>Recurrent costs</b>			<b>67.6/a</b>	<b>55.1/a</b>	<b>53.0/a</b>		

Source of the budget: the domestic EIA Reports, SEPPs, draft project administration manual (PAM)

**Table EMP-4: Potential Impacts and Mitigation Measures during Operation for River Habitation and Flood Control Components**

Item	Potential Impacts/Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Lufeng	Wuding		
<b>Embankment</b>	Embankment stability	<ul style="list-style-type: none"> <li>Inspect all river embankment stabilization works for physical integrity. If signs of failure are discovered, a repair program will be implemented immediately;</li> </ul>	WRBs	LEPBs, IAs	5.0/a	5.0/a	2.0/a	Included in the WRBs' operation cost	Annual EMR
<b>Routine maintenance of river embankment</b>	Impaired flood flow capacity as a result of obstructions and waste accumulation, Pollution and blockage of rivers due to solid waste and wastewater discharge	<ul style="list-style-type: none"> <li>No artificial structures are allowed to be constructed to impound water restricting free flow of flood waters;</li> <li>Regularly maintain the rivers and their embankments, including removal of garbage and vegetation.</li> <li>Periodically remove solid waste and debris, and dispose in municipal landfill;</li> <li>Inspect surrounding areas and ensure that no wastewater is discharged to the rivers without prior treatment.</li> </ul>	WRBs, UMBs	IAs, EPBs	40.0/a	50.0/a	10.0/a	Included in the WRBs' operation cost	Visual inspection, satisfaction survey (after one year).
<b>Routine maintenance</b>	Impaired flood flow	<ul style="list-style-type: none"> <li>Daily maintenance: manage the vegetation including pruning, weeding and</li> </ul>	WRBs, UMBs	IAs, LEPBs	50.0/a	70.0/a	20.0/a	Included in the WRBs'	Visual inspection,

Item	Potential Impacts/Issues	Mitigation Measures and/or Safeguards	Responsibility		Budget (10,000 CNY)			Source of Funds	Performance Indicator
			Who Implement	Who Supervise	Chuxiong	Lufeng	Wuding		
of riverside vegetation and landscaping area	capacity as a result of poor riverine vegetation maintenance	<ul style="list-style-type: none"> <li>replacement of dead or dying trees and shrubs;</li> <li>Pest control: The guiding principle will be prevention first followed by integrated treatment;</li> <li>Fire prevention: Measures for prevention of fire will be put in place.</li> </ul>						operation cost	satisfaction survey (after one year).
Flood protection over design flood levels	Flood monitoring and early warning	<ul style="list-style-type: none"> <li>Installation of flood early warning system including a coordination center, water/rainfall monitoring stations, real-time monitoring cameras, flood warning broadcasting stations</li> <li>Establish framework and mechanism for periodic review and upgrade of flood protection works to account for future climate change (with clear timeframe and triggers).</li> </ul>	IAS, PIUs, WRBs, PIC	CSPMO, ADB	262.0	231.0	226.0	Included in project procurement plan	Project completion report
Qingshanzui Reservoir	Minimum ecological flow	<ul style="list-style-type: none"> <li>Review and adjust the operating procedures of the Qingshanzui Reservoir to ensure that the Longchuan River receives a minimum flow at all times in accordance with the reservoir operating rule on minimum flow provision as defined in the reservoir EIA approved by the Ministry of Environmental Protection in 2005.</li> </ul>	Chuxiong WRB	CSG	-	-	-	WRB operational budget	Annual EMR (first year operation)
<b>TOTAL</b>		<b>One time investment</b>			<b>262.0</b>	<b>231.0</b>	<b>226.0</b>		
		<b>Recurrent costs</b>			<b>95.0/a</b>	<b>125.0/a</b>	<b>32.0/a</b>		

Source of the budget: the domestic EIA Reports, SEPPs, draft project administration manual (PAM)

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#### **D. Environmental Monitoring, Inspection and Reporting**

14. The project monitoring program focuses on the environment within the project's areas of influence in the project city/counties. A detailed environmental monitoring program is shown in **Table EMP-7 and Table EMP-8**, which covers the scope of monitoring, monitoring parameters, time and frequency, implementing and supervising agencies, internal and impact monitoring, and estimated costs. The monitoring shall comply with the methodology provided in the relevant national environmental monitoring standards. Other associated standards to be followed are the national environmental quality standards of air, water and noise, and the pollutant discharge standards.

15. **Internal monitoring and reporting by contractors.** During construction, contractors will be responsible for conducting internal environmental monitoring in accordance with the monitoring plan (**Table EMP-7, Table EMP-8**). Internal monitoring results will be reported through the contractors' monthly project progress reports to the IAs (LPMOs).

16. **Environmental impact monitoring by monitoring stations.** The PIUs will contract the local environmental monitoring stations (EMS) to conduct environmental impact monitoring in accordance with the monitoring plan (**Table EMP-7, Table EMP-8**). A detailed cost breakdown will be provided by the three local EMSs when the environmental monitoring program is updated at the start of each component implementation. Monitoring will be conducted during construction and operation period, until a project completion report (PCR) is issued. Quarterly monitoring reports will be prepared by the EMSs and submitted to CSPMO, LPMOs and the PIUs.

17. **EMP implementation monitoring and progress reporting.** The LIECs will review project progress and compliance with the EMP based on field visits, and the review of the environmental impact monitoring conducted by the EMSs. The findings of the LIECs will be reported to ADB through the semi-annual EMP monitoring and progress reports. The reports will include (i) progress made in EMP implementation, (ii) overall effectiveness of the EMP implementation (including public and occupational health and safety), (iii) environmental monitoring and compliance, (iv) institutional strengthening and training, (v) public consultation (including GRM), and (vi) any problems encountered during construction and operation, and the relevant corrective actions undertaken. The LIECs will help CSPMO prepare the reports and submit the English report to ADB for appraisal and disclosure.

18. An **external environment monitor (EEM)** will be engaged by the EA (CSPMO) to conduct independent verification of the project's compliance with the EMP and relevant PRC regulations and standards. The EEM will review all environment reports, including the quarterly environmental impact monitoring reports and the annual EMP monitoring and progress report, and prepare a concise annual EMP verification report. The report should confirm the project's compliance with the EMP and PRC legislation standards, identify any environment-related implementation issues, and recommend corrective actions.

19. **Project completion environmental audits.** Within three months after each subproject completion, or no later than one year with permission of the City or County EPBs, environmental acceptance monitoring and audit reports of each subproject completion shall be (i) prepared by a licensed environmental monitoring institute in accordance with the PRC Guideline on Project Completion Environmental Audit (2001), (ii) reviewed for approval of the official commencement of



individual subproject operation by environmental authorities, and (iii) finally reported to ADB through the semi-annual EMP monitoring and progress reporting process.

20. **Quality assurance (QA) /quality control (QC) for compliance monitoring.** To ensure accuracy of the monitoring, the QA/QC procedures will be conducted in accordance with the following regulations:

- i) *Regulations of QA/QC Management for Environmental Monitoring* issued by the State Environmental Protection Administration in July 2006;
- ii) *QA/QC Manual for Environmental Water Monitoring* (Second edition), published by the State Environmental Monitoring Centre in 2001; and
- iii) *QA/QC Manual for Environmental Air Monitoring* published by the State Environmental Monitoring Centre in 2001.

21. **Standard monitoring methods.** Table EMP-5 shows the standard monitoring methods, detection limits, and the standard code for each of the monitoring parameters.

**Table EMP-5: Standard Monitoring Methods of Ambient Air, Noise and Water**

Media	Monitoring Parameter	Method (Standard No.)	Detection Limit	Standard Limit
Air	TSP (mg/m <sup>3</sup> )	Gravimetric (GB/T15432-1995)	0.001	0.30 <sup>19</sup>
	PM <sub>10</sub> (mg/m <sup>3</sup> ) <sup>20</sup>	Gravimetric with specific sampler (HJ/T93-2003)	0.0002	0.15
	SO <sub>2</sub> (mg/m <sup>3</sup> )	Spectrophotometry (GB/T15262-1994)	0.003	0.15
	NO <sub>x</sub> (mg/m <sup>3</sup> )	Saltzman Method (GB/T15435-1995)	0.002	0.12
Noise	Equivalent Continuous A Sound (Leq)	Acoustimeter Method (GB12524-90)	0.5	60/55 (day); 50/45 (night) <sup>21</sup>
Surface water	pH value	Glass electrode method (GB6920-86)	0.02 pH	6-9 <sup>22</sup>
	COD <sub>Mn</sub> (mg/L)	Permanganate index (GB11914-89)	0.5	6
	Petroleum (mg/L)	Infrared spectra photograph (GB/T16488-1996)	0.04	0.05
	SS (mg/L)	Gravimetric method (GB11901-89)	4	250
	Total coliforms (no./L)	Membrane filter (GB/T575.12-2006)	10	10,000

<sup>19</sup> All the air parameters are Grade II ambient air standard (daily average).

<sup>20</sup> The local EMSs have no capacity to monitor PM<sub>2.5</sub>.

<sup>21</sup> Grade II and I standard, respectively (Grade I applying to the suburb area).

<sup>22</sup> All the water parameters are Grade III standard.

**Table EMP-6: Environmental Reporting Plan**

<b>Report</b>	<b>From</b>	<b>To</b>	<b>Frequency of Reporting</b>
<b>A. Construction Phase</b>			
Progress reports	Contractor	LPMOs	Monthly
Environmental impact monitoring reports	Local EMSs	LPMOs, PIUs	Quarterly
EMP monitoring and progress report	CSPMO, LIEC	ADB	Semi-annually
External verification report	EEM	CSPMO, LPMOs, PIUs, ADB	Annually
Environmental acceptance monitoring and audit reports	Licensed institute	City/county EPBs, CSPMO, IAs, PIUs, ADB	Within three month after component completion
<b>B. Operation Phase (until PCR is issued)</b>			
EMP monitoring and progress reports	LPMOs, EMSs	CSPMO, ADB	Annually

*Source: Domestic EIAs and Consultant's proposal*

**Table EMP-7: Environmental Monitoring Program (For Infrastructure Components)**

Subject	Parameter	Location	Frequency	Who Implements	Who Supervises	Estimated Cost (RMB 10,000)		
						Chuxiong	Wuding	Lufeng
	Construction							
Surface water	SS, NH3-N, oil, COD, total coliforms	At each project bridge, 50m upstream, and 50 and 100m downstream	Impact Monitoring: Once per day, for 3 consecutive days, 4 times per year during construction activities.	EMS	LPMOs, EPBs	12.5	6.0	6.5
Air	Inspection of dust mitigation measures (water spraying, cover transport vehicles, etc.); and maintenance of vehicles and construction equipment	Visual inspection at all construction sites.	Internal Monitoring: weekly	CSC	PIUs	Included in the construction supervision contract		
			External Monitoring: At least twice per year	LIEC, (EEM)	PIUs, EPBs	Included in PIC and EEM contracts		
		TSP, SO <sub>2</sub> , NOx	At all construction sites (at least one point upwind, two points downwind) and sensitive receivers nearby (see Chapter IV-sensitive receivers within project area of influence)	Impact Monitoring: Twice per day for 3 consecutive days, 4 times per year during construction activities.	EMSs	LPMOs, EPBs	9.5	5.0
Noise	LAeq	At the boundary of all construction sites and sensitive receivers nearby (see Chapter IV-sensitive receivers within project area of influence)	Impact Monitoring: Twice per day (once in day time and once at night time) for 2 consecutive days, 4 times per year during construction activities.	EMSs	LPMOs, EPBs	6.5	4.0	4.0
Solid Waste	Garbage from work-camps and construction waste at construction sites	Visual inspection at all construction sites and work-camps	Internal Monitoring: weekly	CSCs	PIUs	Included in the construction supervision contract		
			External Monitoring: Twice per year	LIEC, (EEM)	EPBs, EA, ADB	Included in PIC and EEM contracts		
Soil erosion, vegetation	Soil erosion intensity, re-vegetation	Visual inspection at borrow pit and spoil sites	Internal Monitoring: Random check after rainstorm (rainfall > 50mm)	CSCs	PIUs	Included in the construction supervision contract		

Subject	Parameter	Location	Frequency	Who Implements	Who Supervises	Estimated Cost (RMB 10,000)		
						Chuxiong	Wuding	Lufeng
			External Monitoring: twice per year, and once after completion of construction	LSMI, LIEC, (EEM)	EPBs, EA, ADB	Included in loan implementation TA contract		
	Slope stability, topsoil stockpile and rehabilitation of construction sites	Visual inspection of all subgrade slopes and retaining walls, bridges, culverts	Internal Monitoring: At least four times per year	CSCs	PIUs	Included in the construction supervision contract		
			External Monitoring: Twice per year, and once after completion of construction	LIEC, (EEM)	EPBs, EA, ADB	Included in PIC and EEM contracts		
	Compensatory plantings and re-vegetation of borrow pits, spoil disposal sites and construction sites	Visual inspection at all disposal sites, borrow pits and temporary occupied lands	Internal Monitoring: At least four times per year	CSCs	PIUs	Included in the construction supervision contract		
			External Monitoring: Twice per year, and once after completion of construction	LIEC, (EEM)	EPBs, EA, ADB	Included in PIC and EEM contracts		
Occupational health and safety	Work camp hygiene and safety, availability of clean water and emergency response plans	Inspection at all construction sites and work-camps	Internal Monitoring: Monthly	CSC	City/county IAs, PIUs	Included in the construction supervision contract		
			External Monitoring: Twice per year	LIEC	City/county Health Bureau	Included in loan implementation TA contract		
Subtotal						28.5	15.0	16.5
Operation Phase								
Noise	LAeq	All sensitive receivers along the roads and nearby bridges	Twice per day (once in day time and once at night time) for 2 consecutive days, twice per year	EMSs	IAs, EPBs	1.5/a	1.0/a	1.5/a
Air	TSP, SO2, NOx, PM10	All sensitive receivers along the roads and nearby bridges	Twice per day for 3 consecutive days, twice per year	EMSs	IAs, EPBs	3.0/a	2.0/a	3.0/a
Surface water	pH, SS, DO, NH3-N, oil, COD, total coliforms	50m upstream and 50 and 100m downstream of project bridges.	Once per day, for 3 consecutive days, once per year	EMSs	IAs, EPBs	6.0/a	4.5/a	6.0/a
Soil and Vegetation	Vegetation survival and coverage rate	Re-vegetated sites (spoil disposal sites, construction	Spot check, twice per year	OPFs, LPMOs	EPBs, Forestry Bureau,	Included in OPF's operation budget		

Subject	Parameter	Location	Frequency	Who Implements	Who Supervises	Estimated Cost (RMB 10,000)		
						Chuxiong	Wuding	Lufeng
Traffic flow and safety	Vehicle numbers and road use (against predictions), accident incidents	sites) Project roads	Road traffic monitoring program	OPFs, LPMOs	CSPMO City/county Traffic Bureau, CSPMO			
<b>Subtotal</b>						<b>10.5/a</b>	<b>7.5/a</b>	<b>10.5/a</b>

BOD5 = 5-day biochemical oxygen demand; CODcr = chemical oxygen demand; CSC = construction supervision company; EMS = environmental monitoring station; EPB = environmental protection bureau; IA = implementation agency; LAeq = equivalent continuous A-weighted sound pressure level; LSMI = licensed soil erosion institute; NH<sub>3</sub>-N = ammonia nitrogen; NOx = nitrogen oxides; OPF = operators of project facilities; PM10 = particles measuring 10µm or less; PMO = project management office; SO<sub>2</sub> = sulfur dioxide; SS = suspended solids; TSP = total suspended particle

**Table EMP-8: Environmental Monitoring Program (For River Rehabilitation and Flood Control Components)**

Subject	Parameter	Location	Frequency	Who Implement	Who Supervise	Estimated Cost (RMB 10,000)	
						Chuxiong and Lufeng	Wuding
Construction Phase							
Construction wastewater	pH, SS, oil	At discharge points of all construction sites	Impact Monitoring: One sampling each day each time, twice per year	EMS	PIUs, EPBs, WCBs	2.0	1.0
Work-camp domestic wastewater	pH, SS, NH3-N, CODcr, oil, total coliform	At domestic wastewater discharge points of all work-camps	Impact Monitoring: One sampling each day each time, twice per year	EMS	PIUs, EPBs, WCBs	4.0	2.0
Surface water	pH, DO, SS, NH3-N, CODcr, oil, anionic surfactants	50m upstream, and 50m and 100m downstream of construction activities on project river.	Internal Monitoring: one sampling each day, 3 consecutive days, 6 times per year.	Contractors	PIUs, CSCs	10.0	5.0
			Impact Monitoring: one sampling each day, two consecutive days, 4 times per year	EMS	LPMO, EPBs	5.0	2.5
Air	Inspection of dust mitigation measures (water spraying, cover transport vehicles, etc.); and maintenance for vehicles and construction equipment	At all construction sites	Internal Monitoring: At least six times per year	CSC	PIUs	Included in the construction supervision contract	
			External Monitoring: Twice per year	LIEC, (EEM)	EPBs, WCBs	1.0	0.5
		PM10, SO2, NOx	At all construction sites (at least one point upwind, two points downwind); and	Impact Monitoring: Twice per day for three consecutive days, twice	City/county EMS	City/county PIUs, EPBs,	3.0

Subject	Parameter	Location	Frequency	Who Implement	Who Supervise	Estimated Cost (RMB 10,000)	
						Chuxiong and Lufeng	Wuding
		at the proposed 10 monitoring sites/stations	per year				
Noise	LAeq	At boundary of all construction sites.	Impact Monitoring: Twice per day (once in day time and once at night time) for 2 consecutive days, twice per year	EMS	PIUs, EPBs,	1.0	0.5
Soil erosion	Inspection of topsoil stockpile and construction site rehabilitation (e.g. compensatory plantings)	At all construction sites	Internal Monitoring: At least four times per year	CSC	City/county PIUs,	Included in the CSC contract	
			External Monitoring: Twice per year	LIEC, (EEM)	EPBs	Included in TA contract and EEM contract	
Occupational health and safety	Inspection of hygiene status, availability of clean water and emergency response plans	At all construction sites and work-camps	Internal Monitoring: Monthly	CSC	City/county PIUs,	Included in the CSC contract	
			External Monitoring: Twice per year	LIEC, (EEM)	LBs	Included in TA contract and EEM contract	
Subtotal						16.0	8.0
Operation Phase							
Surface water	pH, DO, SS, NH3-N, TP, CODcr, oil, anionic surfactants	4 points along the rivers, and at the proposed 10 monitoring sites/stations	Compliance monitoring: One sampling each day, three consecutive days, four times per year	City/county EMS	City/county EPBs	5.0/a	1.0/a
Fauna	Selected fauna species, total bird and fish populations	First section of Longchuan River	Internal Monitoring: Twice per year	City/county WRBs	City/county EPBs, FBs	2.0/a	1.0/a
Flora	Health and recovery of re-vegetated areas	Along all proposed river	Internal Monitoring: Once per year	City/county WRBs	City/county EPBs, FBs	2.0/a	1.0/a
Subtotal						9.0/a	3.0/a

COD<sub>Cr</sub> = chemical oxygen demand; COD<sub>Mn</sub> = permanganate index; CSC = construction supervision company; EMS = Environmental Monitoring Station; EPB = Environmental Protection Bureau; IA = implementation agency; LAeq = equivalent continuous A-weighted sound pressure level; NH<sub>3</sub>-N = ammonia nitrogen; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> = particles measuring 10µm or less; SO<sub>2</sub> = sulfur dioxide; SS = suspended solids; TP = total phosphorus; TSP = total suspended particle;

## E. Training

22. To ensure effective implementation of the EMP, the capacity of the CSPMO, LPMOs, PIUs, OPFs, CSCs and contractors must be strengthened, and all parties involved in implementing mitigation measures and monitoring of environmental performance must have an understanding of the goals, methods, and the best practices of project environmental management. The Yunnan Provincial EPB, Chuxiong Prefecture EPB and LIECs will offer training specific to their roles for the project. The main training emphasis will be to ensure that the contractors, CSCs, IAs and OPFs are well versed in environmentally sound practices and are able to undertake all construction and operation with the appropriate environmental safeguards.

23. The training program addresses immediate training needs, i.e. training needed for project personnel in order to ensure that involved institutes are well versed in environmentally sound practices and are able to undertake all construction with the appropriate environmental safeguards.

24. The training program also addresses long-term capacity building needs, i.e. for the operational phase of the project. Training will be provided by qualified experts on solid waste management planning, operation and maintenance of storm water retention ponds, strategic urban and regional planning (including strategic environmental impact assessment of urban development plans), sustainable urban transport planning, road safety, and emergency preparedness and response planning.

25. The following training programs will be delivered or organized by the project management consulting service during the course of project implementation. Training Needs Assessments will be conducted by the Project Implementation Consultant to tailor the training for maximum impact. The trainer will include in their program a before/after assessment to evaluate the success of the training. The PIC (environment specialist) will design an evaluation questionnaire to gauge the usefulness of the training/capacity building design and performance of the trainer. The evaluation will be taken into account in the trainer's performance evaluation.

**Table EMP-9: Indicative List of Training Program Related to Environment**

Training program	Scope of Training	Trainer	Trainee
Procurement and contract management	<ul style="list-style-type: none"> <li>– ADB's procurement process</li> <li>– Bidding document preparation, including EMP clauses</li> <li>– ADB's guideline for bid evaluation</li> <li>– Risk of improper procurement and mitigation measures</li> <li>– Handling variation orders and contract management</li> </ul>	SCS, PMC	CSG, IAs, PIUs
Operation and maintenance of storm water retention ponds	<ul style="list-style-type: none"> <li>– Basic facility operation and maintenance of storm water retention ponds</li> <li>– Routine maintenance and monitoring</li> <li>– Technical requirement</li> <li>– Facility management (e.g., financial management, governance, emergency response mechanism, occupational health and safety)</li> <li>– Innovative approach in foreign countries</li> </ul>	PMC	CSG, IAs, PIUs
Implementation of EMP and other health and safety requirements	<ul style="list-style-type: none"> <li>– EMP implementation, including implementation responsibilities, environmental monitoring, inspection and reporting, consultation and participation, mechanism of EMP review, feedback and adjustment;</li> <li>– Grievance Redress Mechanism (GRM), including GRM structure, responsibilities and timeframe, types of grievances, eligibility assessment;</li> <li>– Environment, Health and Safety (EHS) considerations during project construction and operation, including community and occupational health and safety;</li> <li>– Monitoring and inspection methods, data collection and processing, interpretation of data, reporting system;</li> <li>– Communication with the public by different means (Innovative community-based advocacy campaigns)</li> <li>– Prevention and control of transmissible diseases and HIV/AIDS</li> </ul>	PMC, LIEC	CSG, IAs, PIUs Contractors, local EPBs, GRM access points, other related local bureaus (e.g., water resources bureaus)
Strategic urban and regional planning	<ul style="list-style-type: none"> <li>– Policy analysis on for Chuxiong Yi Autonomous State's overall regional and urban planning</li> <li>– International and national good practices for strategic regional and urban planning</li> <li>– Regional SWOT assessment for the Chuxiong Yi Autonomous State and its small- and medium-sized cities</li> <li>– Strategic environmental impact assessment for urban development plans</li> </ul>	PMC  External resource person engaged by the project management consulting	CSG and IAs



Training program	Scope of Training	Trainer	Trainee
		service	
Municipal solid waste management	<ul style="list-style-type: none"> <li>– International and national good practices for solid waste management</li> <li>– Municipal solid waste management planning approaches</li> <li>– Municipal solid waste management technologies and options</li> <li>– Data collection procedure and waste composition analysis</li> <li>– Stakeholder assessment</li> <li>– Institutional responsibility and set-up</li> <li>– Municipal solid waste management policy making</li> <li>– Public awareness program and public willingness</li> <li>– Use of performance indicators</li> <li>– Short-, medium- and long-term planning</li> </ul>	PMC	CSG, IAs, PIUs, other related local bureaus (e.g. urban management bureau),
Sustainable transport planning	<ul style="list-style-type: none"> <li>– International and national good practice for urban transport planning</li> <li>– Coordination with urban and regional plans</li> <li>– Transport demand and projection analysis</li> <li>– Transport data collection procedure (person-trip survey)</li> <li>– Stakeholder assessment</li> <li>– Institutional responsibility and set-up</li> <li>– Policies for promoting sustainable, green and inclusive urban transport planning</li> <li>– Public awareness program and public willingness</li> <li>– Use of performance indicators</li> <li>– Short-, medium- and long-term planning</li> </ul>	PMC	CSG, IAs, PIUs, other related local bureaus (e.g. transport bureau),
Road safety	<ul style="list-style-type: none"> <li>– International and national good practice for road safety</li> <li>– Road safety audit tools and approaches</li> <li>– Data collection for road safety</li> <li>– Stakeholder assessment</li> <li>– Institutional responsibility and set-up</li> <li>– Policies for improving road safety</li> <li>– Public awareness program and education</li> <li>– Use of performance indicators</li> <li>– Short-, medium- and long-term planning</li> </ul>	PMC	CSG, IAs, PIUs, other related local bureaus (e.g. transport bureau),
Emergency preparedness and response planning	<ul style="list-style-type: none"> <li>– Environmental accidents, mitigation measures;</li> <li>– Emergency response team, procedure and actions;</li> <li>– Flood emergency planning</li> <li>– Flood early warning system</li> <li>– Framework and mechanism to review and adapt flood protection works to climate change</li> </ul>	PMC	CSG, IAs, PIUs, other related local bureaus.

ACWF = All China Women's Federation, ADB = Asian Development Bank, CSG = Chuxiong Yi Autonomous Prefecture Government, EA = executing agency, EHS = environment health and safety, EMC = environment management consultant, EMP = environment management plan, EPB = environment protection bureau, GRM = grievance redress mechanism, IA = implementing agency, PIU = project implementing unit, PMC = project management consulting service, RP = resettlement plan, SCS = start-up consulting service.

## F. Public Consultation

26. Meaningful consultation was conducted during project preparation. The consultation process and its outcome are described in Chapter VII of this project EIA. Direct public participation was conducted as an ongoing element in the development of the sub-components. These activities were carried out by the DIs in their preparation of the FSRs and EIAs and by the Technical Assistance (TA) Consultants following PRC National Environmental Impact Assessments Technical Guidelines and Asian Development Bank guidelines and the Safeguard Policy Statement (2009).

27. Future plans for public involvement during construction and operation phases were developed during the project preparation. These plans include public participation in (i) verifying impacts and mitigation measures during the construction and operation stages, (ii) evaluating environmental and economic benefits and social impacts, and (iii) interviewing the public after the sub-components are completed.

28. Public participation plans are part of the project implementation and management plan. The LPMOs and PIUs are responsible for public participation during project implementation. They will be supported by the LIEC. The EEM may conduct his/her consultation during site visits, as needed. Costs for public participation activities during construction are included in the project funding.

**Table EMP-10: Consultation and Participation Plan**

Organizer	Approach	Times/Frequency	Subjects	Participants
<b>Project preparation</b>				
EIA preparation authors (Institutes)	Questionnaires and interviews	During field work for EIA	Project priority, effects, attitudes to the Project/ components, and suggestions	Residents within subproject areas and construction area
TA Consultants, ADB	Site visits, and public consultations	Two rounds of formal consultation in each city, 5 review missions	Comments and recommendations of affected people and stakeholders	Representatives of affected people and stakeholder agencies
TA Consultants, and LPMOs	Establish Grievance Redress Mechanism arrangements in each county/city	Ongoing	Pathway for complaints from and resolution of environmental problems in construction and operation	Affected persons, AP representatives and other stakeholders
<b>Construction</b>				
PIUs, LPMOs, LIEC	Public consultation through questionnaire survey, site visits	At least once a year	Adjusting mitigation measures if necessary,	Work staff within construction area; Residents within construction area

Organizer	Approach	Times/Frequency	Subjects	Participants
			construction impacts, comments and suggestions	
	Expert workshops	As needed, based on public consultation	Comments and suggestions on mitigation measures, public opinions; adjusting mitigation measures accordingly	Experts from various sectors
	Public workshops	At least once prior to mid-term review mission	EMP implementation progress, adjusting mitigation measures if necessary, construction impacts, comments and suggestions	Representatives of residents and social sectors
<b>Test Operation</b>				
LPMOs, PIUs, Operators	Site visits	Multiple, depending on results of Project completion environmental audit	Comments and suggestions on operational impacts, public suggestions on corrective actions	Local residents and social sectors, EPBs
<b>Operation</b>				
LPMOs, PIUs, Operators	Public satisfaction survey	At least once after one year of operation	Comments and suggestions	Project beneficiaries

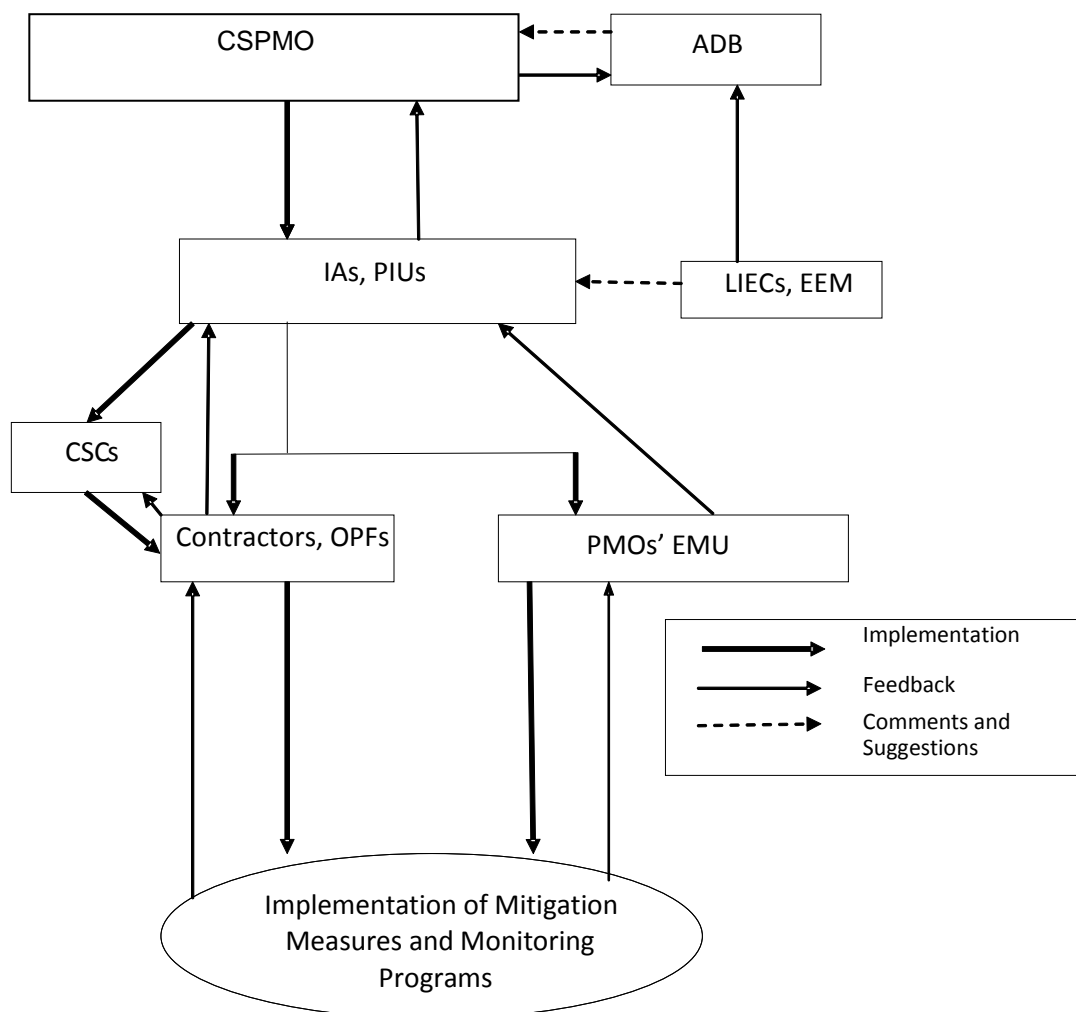
EIA = Environmental Impact Assessment, PIU = Project Implementing Unit, LPMO = Local Project Management Office, LIEC = Loan Implementation Environmental Consultant, TA = Technical Assistance.

## **G. Mechanisms for Feedback and Adjustment**

29. Based on environmental inspection and monitoring reports, the CSPMO, LPMOs, PIUs shall decide, in consultation with the LIEC and the EEM, whether (i) further mitigation measures are required as corrective actions, or (ii) some improvements are required for environmental management practices.

30. The effectiveness of mitigation measures and monitoring plans will be evaluated by a feedback reporting system. Adjustment to the EMP will be made, if necessary. The LPMOs and their EMUs will play a critical role in the feedback and adjustment mechanism.

31. If during inspection, substantial deviation from the EMP is observed or any changes are made to the project that may cause substantial adverse environmental impacts or increase the number of affected people, then the CSPMO and the LPMOs will immediately consult with ADB and form an environmental assessment team to conduct additional environmental assessment and, if necessary, further public consultation. The revised EIA report including the EMP will be submitted to the ADB for review and appraisal, and disclosure. The revised EMP will be passed to the contractors, CSCs and OPFs for implementation. The mechanism for feedback and adjustment of the EMP is shown in **Figure EMP-1**.



**Figure EMP-1: Mechanism for Feedback and Adjustment of**

## H. Grievance Redress Mechanism (GRM)

32. Each IA (through their LPMO) will establish a grievance redress mechanism (GRM) to address community concerns and complaints. Grievances will most likely include disturbance of traffic; dust emissions; construction noise; soil erosion; inappropriate disposal of waste materials; damage to private houses; safety measures for the protection of the general public and construction workers; or water quality deterioration during riverbank works. In addition to serving as a platform to resolve grievances, the GRM has been designed to help achieve the following objectives: (i) open channels for effective communication, including the identification of new environmental issues of concern arising from the project components; (ii) prevent and mitigate any adverse environmental impacts on communities caused by project implementation and operations; (iii) improve mutual trust and respect and promote productive relationships with local communities

and other stakeholders; and (iv) build community acceptance for the project.

33. The GRM will be accessible to diverse members of the community and stakeholders. Multiple points of entry, including face-to-face meetings, written complaints, telephone conversations, or e-mail, will be available.

34. Each LPMO will establish a Project Public Complaint Unit (PPCU), which will be coordinated by the environment management unit (EMU) of the LPMO. The PPCUs will instruct contractors and CSCs if people complain about the project. The PPCUs will coordinate with the local EPBs and other government divisions, if necessary, and will be supported by the Loan Implementation Environmental Consultant (LIEC), hired under the Project Implementation Consultant Support (PIC). The PPCU will establish a GRM tracking and documentation system, including procedures to retrieve data for reporting purposes to the CSPMO and ADB.

35. The contact persons for different GRM entry points, such as contractor, operators of project facilities (OPFs), local EPB, PPCU, etc., will be identified prior to construction. The contact details for the entry points (phone numbers, addresses, e-mail addresses) will be publicly disclosed on information boards at construction sites and on the website of the local EPBs. The chart of proposed GRM is shown in **Figure EMP-2**.

36. Once a complaint is received and filed, the PPCU will identify if complaints are eligible. Eligible complaints include those where (i) the complaint pertains to the project; and (ii) the issues arising in the complaint fall within the scope of environmental issues that the GRM is authorized to address. Ineligible complaints include those where: (i) the complaint is clearly not project-related; (ii) the nature of the issue is outside the mandate of the environmental GRM (such as issues related to resettlement, allegations of fraud or corruption); and (iii) other procedures are more appropriate to address the issue. Complaints illegible to the project or the environmental GRM will be recorded and passed onto relevant authorities. If an eligible complaint is rejected, the complainant will be informed of the decision and the reasons for rejection.

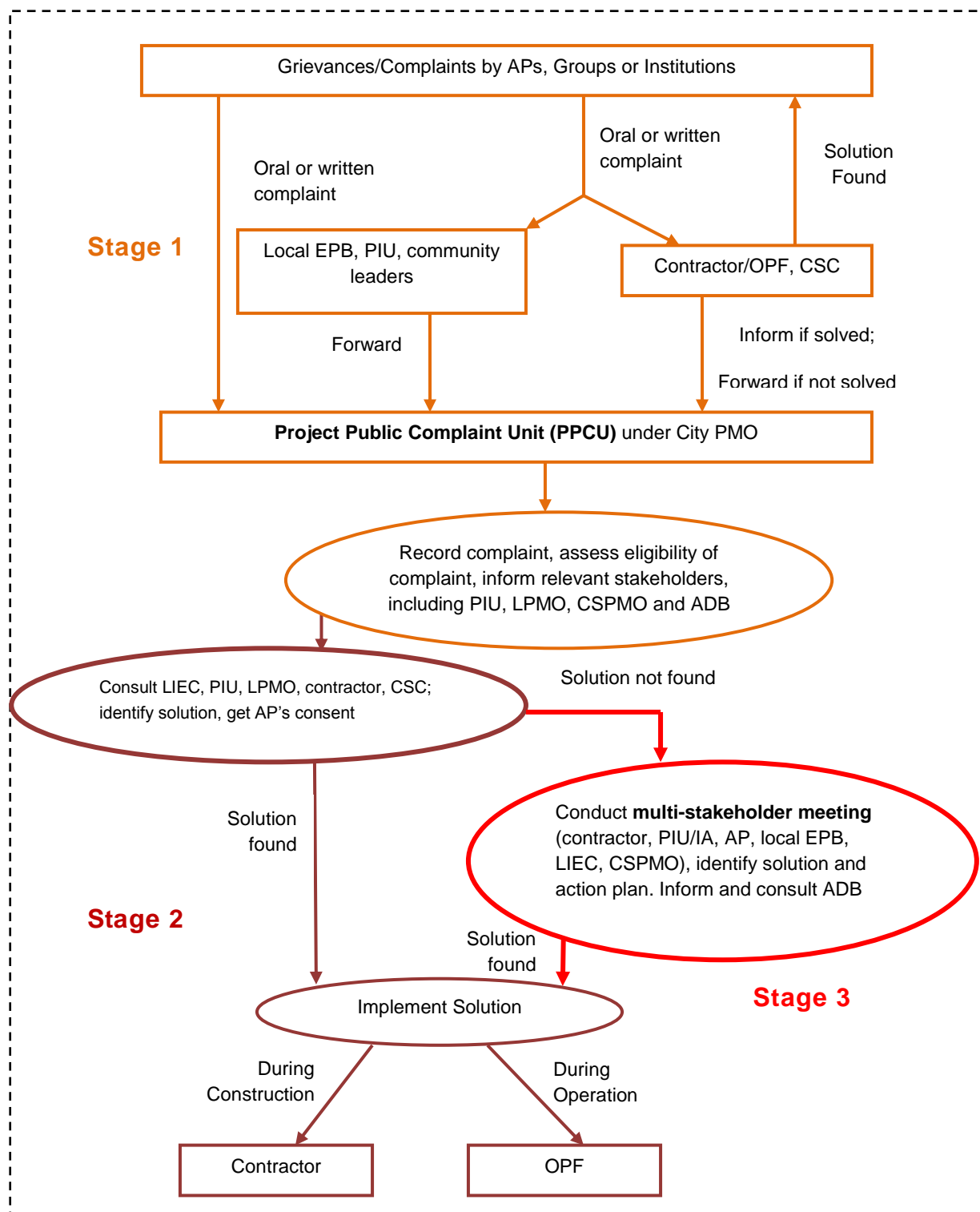
37. The **procedure and timeframe** for the grievance redress mechanism are described as follows (see **Figure EMP-2**):

38. **Stage 1:** If a concern arises during construction, the affected person will submit a written or oral complaint to the contractor directly. Whenever possible, the contractor will resolve the issue directly with the AP. The contractor shall give a clear reply within five (5) days. If successful, the contractor will inform the PPCU accordingly.

39. **Stage 2:** If no appropriate solution can be found after the Stage 1 process applied (i.e., after 5 days), the contractor has the obligation to forward the complaint to the PPCU. The AP may also decide to submit a written or oral complaint to the PPCU, either directly or via one of the GRM entry points (local EPB, PIU, community leaders). For an oral complaint, proper written records must be made. The PPCU will assess the eligibility of the complaint, identify the solution and provide a clear reply for the complainant within five (5) working days. The LIEC will assist the PPCU in replying to the affected person, if needed. The PPCU will also inform the ADB project manager and submit all relevant documents. Meanwhile, the PPCU will timely convey the complaint/grievance and suggested solution to the contractors or OPFs. The contractors during construction and the OPFs during operation will implement the agreed upon redress solution and report the outcome to the PPCU within seven (7) working days.

40. **Stage 3:** In case no solution can be identified by the PPCU, or the complainant is not satisfied with the proposed solution, the PPCU will organize, within two (2) weeks, a multi-stakeholder hearing (meeting) involving all relevant stakeholders (including the complainant, contractor, OPFs, local EPB, PIU, LPMO, CSPMO). The hearing shall identify a solution acceptable to all, and formulate an action plan. The contractors during construction and the OPFs during operation will implement the agreed-upon redress solution and report the outcome to the PPCU within the agreed upon timeframe.

41. The PPCU shall accept the complaints/grievances lodged by the AP free of charge. Any cost incurred should be covered by the contingency of the project. The grievance procedures will remain valid throughout the duration of project construction and until project closure.



**Figure EMP-2: Proposed GRM (to be reviewed and adjusted at project inception)**

*Note: AP = affected person, EPB = environmental protection bureau, OPF = operator of project facilities, LIEC = loan implementation environmental consultant; CSPMO = Chuxiong State project management office; LPMO = local project management office; PIU=project implementation unit; CSC=construction supervision company.*



# Procurement Capacity Assessment

Project Number: 45507  
October 2013

People's Republic of China: Yunnan Chuxiong Urban  
Environment Improvement Project

## **PROCUREMENT CAPACITY ASSESSMENT**

### **A. Introduction**

1. As part of the project-preparation process, Asian Development Bank (ADB) requires an assessment of the capacity of key project entities to procure goods, works and consulting services, and recommendations to be made on actions required to address weakness or constraints. Specifically, the assessment involves: (i) evaluating the ability of key entities' procurement processes to comply with ADB's procurement guidelines; (ii) identifying the need for training and specific procurement arrangements (in resources or processes) to be adopted during project preparation and implementation, to develop staff competence and improve effectiveness, and to minimize implementation risks; and (iii) defining the appropriate level of review, either prior or post by ADB.

### **B. Expected Procurement under the Project**

2. The project will involve a broad range of procurement contracts covering consulting services, goods and works contracts. There are four (4) goods contracts procured by international competitive bidding (ICB) (above \$1.0 million), three (3) works contract procured by ICB (above \$10 million), four (4) goods contracts procured by national competitive bidding (NCB) (between \$0.1 million but less than \$1.0 million), eighteen (18) works contracts procured by NCB (between \$0.2 million and \$10 million), and five (5) goods contracts procured by shopping (below \$0.1 million). There will be also two (2) consulting service packages, one using a quality- and cost-based selection (QCBS) and the other using an individual consultant selection (ICS). The QCBS will use quality:cost ratio of 80:20 to procure a consulting service for the loan implementation.

### **C. Assessment of General Procurement Environment**

3. The assessment of the general procurement environment for People's Republic of China (PRC) is an exercise that is undertaken by ADB and updated normally on an annual basis. The ADB assessment is shown in Table 1. This assessment is essentially to ascertain the level of risks (low, average, or high) associated with the procurement process. The main areas with high risks are identified to be:

- (i) existing procurement law makes no differentiation between procurement processes for consulting services and goods/works;
- (ii) lack of a procurement manual specifying how the legal requirements are translated into detail work procedures, and
- (iii) lack of procurement accreditation or professionalization program.

4. However, the requirement to adhere to the procedures stated in ADB Procurement Guidelines will mitigate these risks to acceptable levels.

**Table 1: The National Procurement Environment (PRC)**

General Procurement Environment Assessment		Risk Assessed as	Low	Average	High
1.	Is there a procurement law? <i>The answer to this is a simple yes or no, i.e. is there a single law governing procurement which is representative of best practice or is procurement governed through various laws, decrees etc.? Assess this as either "High" or "Low".</i>	X yes			
2.	Are the laws and regulations clear and concise? <i>If there is no single law check "high", and similarly if the law is complex and difficult to follow check "average". If the law is easy to follow check "low".</i>	X			
3.	What does the law (or regulations applicable to procurement) cover? <i>If there is a single law, "low" will apply when the law covers drafting and use of standard bidding documents evaluation, contracting, through to the management of contracts including payment, warranty and defects liability periods. The less the procurement process is covered the higher the risk. If there is no single law, check "high".</i>			X	
4.	Does the law cover the procurement of consulting services? <i>If consulting services are not covered or there is no law the risk is high, if they are covered the risk is low.</i>			X	
5.	Does the law differentiate between processes for consulting services and Goods/Works? <i>If there is no law, or it applies the same processes to consulting services as for goods and works check high. If there is some differentiation but the processes are similar, check average. If consulting services are dealt with separately check low.</i>			X	
6.	Does the law require advertisement of all procurement opportunities <i>Low risk will be represented through advertisement all above \$25,000, average above all above \$100,000, high by no advertisement or advertisement at a higher threshold than \$100,000.</i>	Requirements are different in different provinces and sectors			
7.	Are contract awards advertised? <i>The same thresholds as stated at question 6 should be applied.</i>				
8.	Are there restrictions on goods works and services on the basis of origin? <i>If procurement is limited to solely national origin check high, if there are restrictions or a national preference scheme, average. If None low.</i>	X			
9.	Do the law or relevant legislation and regulations provide acceptable provision for the participation of state owned enterprises? <i>Only if the SOE is legally and financially autonomous and not a dependent agency of the purchaser low, other than this high.</i>				X
10.	Are there restrictions on the nationality of bidders and consulting firms invited? <i>If procurement is limited to solely national firms and individuals check high, if there are restrictions or a national preference scheme, average. If None low.</i>	X			
11.	Are foreign bidders and consultants forced to offer through or with local partners? <i>If yes, high; in certain circumstances, average; never, low.</i>			X	
12.	Is there a domestic preference scheme? <i>If there is across the board high, if applicable in limited circumstances, average, if none, low.</i>	X			
13.	Is there a national standard mandated for use for quality control purposes? <i>No, or Yes with direct, accessible international equivalents low, yes without international equivalents high.</i>				X
14.	Are any agencies exempt from the law? <i>Such as the security forces, if yes high, also high of any types of goods are exempt from parts of the law such as medicines, text books or any other commodity.</i>	For government procurement, yes; For general procurement, no			
15.	Is the default method for procurement open competition? <i>Either yes or no and low or high.</i>	X			

**Table 1: The National Procurement Environment (PRC)**

General Procurement Environment Assessment		Risk Assessed as	Low	Average	High
16.	Is open procurement easily avoided? <i>If the procurement law allows avoidance of open procurement above the national threshold on the basis of circumstances that are not in response to natural disasters, i.e. simple urgency, check high, if open procurement can be avoided by senior management decision average. If avoidance requires approval of an oversight agency, low.</i>	X			
17.	Do the rules and regulations require pre-qualification? <i>Only for complex contracts, low, no contracts average, all contracts high.</i>	X			
18.	Do the rules and regulations require registration? <i>If yes, high, if only for specialist goods such as medicines average. If no registration low.</i>	Require company registration			
19.	Are there systematic procurement process audits? <i>Yes, low. Only financial audits average, none, high.</i>		X		
20.	Is there a national procurement manual or guide? <i>A single procurement manual or guide, low, manual exists but out of date/not in wide use average, none high.</i>	X			
21.	Do the laws and regulations mandate the use of standard documents? <i>Documents for goods, works and consultants services low, just for 2 of the three average, only one or none high.</i>	Depending on which sector, some line ministries have standard documents			
22.	Have these standard bidding documents been approved for use on ADB projects? <i>Yes low, some but not all average, no high.</i>	X			
23.	Do the regulations require the collection of nationwide statistics on procurement? <i>Yes and statistics collected low, yes but data not collected or used average, no high.</i>				X
24.	Is consolidated historical procurement data available to the public? <i>Yes low, too much or too little, average, no high.</i>				X
25.	Do the procurement laws and regulations contain provisions for dealing with misconduct? <i>Such as fraud and corrupt practices – the procurement law or regulations may include or cross refer to anti-corruption legislation. Yes low, no high.</i>	X			
26.	Is fraud and corruption in procurement regarded as a criminal act? <i>The penalties should include penal servitude (prison) yes low, no high.</i>	X			
27.	Have there been prosecutions for fraud and corruption? <i>If there have been successful prosecutions for fraud and corruption, low, if prosecutions seem to focus solely on low grade junior staff average, none high.</i>	X			
28.	Is there an alternative disputes resolution process independent of government and courts? <i>If there is an arbitration law and independent process low, if the standard contracts use ICC or similar dispute resolution average, if arbitration is through the courts or can be overturned by courts high.</i>		X		
29.	Does the law allow for sovereign immunity to the EA for claims against it? <i>If plaintiffs can sue the government for contractual non-performance low, if they cannot high.</i>	X			
30.	Do the regulations allow for black listing (disbarment) of firms and individuals? <i>If there is no black listing process or the process is transparent and equitable and undertaken by an independent oversight agency low. If there is a process and it is administered by a single line agency such as finance average, if it is administered by the executing agency high.</i>	X			

**Table 1: The National Procurement Environment (PRC)**

General Procurement Environment Assessment		Risk Assessed as	Low	Average	High
31.	Which body oversees procurement? <i>Independent body reporting to the elected body low, single body reporting to the cabinet average, no body or reports to a single state agency such as the Prime Minister or Finance Minister high.</i>		By the government at different levels		
32.	What powers does the oversight body have? <i>If the body can impose administrative sanctions on an EA and its staff and overturn contract awards including ministerial decisions low, if the body only can impose sanctions through the head of the EA, average, if the body can only recommend action high.</i>			X	
33.	Is there a nationwide procurement training plan? <i>If procurement training is assessed and planned for nationwide low, if this is delegated to line agencies average, if there is no strategy or plan high.</i>			X	
34.	Is there a procurement accreditation or professionalization program? <i>An externally recognized program low, a government sponsored program average, none, high.</i>				X
35.	Are major projects identified within an agencies appropriation or budget? <i>Yes low, no but a system in place for the ring-fencing of project funds average, neither low.</i>	X			
36.	Is the procurement cycle tied to an annual budgeting cycle? I.e. can procurement activity only commence once a budget is approved? <i>No a medium expenditure framework is in place low, activity may start up to but excluding contract award average, yes tied to annual budget high.</i>		Budget needs to be approved, but may not be always on annual basis.		
37.	Once an appropriation or budget is approved will funds be placed with the EA or can the EA draw them down at will? <i>Yes low, no – additional controls imposed high (such as cash release system).</i>				X
38.	Can an EA draw directly from a loan or imprest account or will it spend budgeted funds with the borrower claiming reimbursement? <i>Draws directly low, from budgeted funds high.</i>		Both		
39.	When an EA is implementing a project using funds from the national budget has a delay in funding significantly delayed procurement? <i>No or not applicable low, yes high.</i>			X	

## **D. Roles and Responsibilities of Agencies**

5. **Executing agency.** Chuxiong State project management office (CSPMO) will take a lead and be responsible for all procurement processes under the project. The CSPMO will engage a qualified tendering company to assist in procurement for three subprojects: Chuxiong urban infrastructure and environment improvement subproject, Lufeng urban infrastructure and environment improvement subproject, and Wuding urban infrastructure and environment improvement subproject.<sup>1</sup> The CSPMO will also coordinate with the startup consultants engaged under the project, the project management consultant team, and the design institute to handle bid documents preparation, bid process, bid evaluation, preparation and submission of a bid evaluation report to ADB in accordance with ADB's procurement guidelines. All consulting services will be engaged by the CSPMO in accordance with ADB's guidelines. The procurement capacity of the CSPMO is, therefore, important to the project.

6. **Implementing agency.** Under the CSPMO, the executing agency, there are three implementing agencies for the project, Chuxiong City Government, Lufeng County Government and Wuding County Government. The primary role of each implementing agency is to carry out the construction of the subproject in each city, and they are responsible for project supervision and quality control. The primary role of the implementing agencies include (i) in-charge of all day-to-day management work during the project preparation and implementation period; (ii) make necessary coordination with all involved parties and government agencies for the project implementation; (iii) communicate and coordinate with the CSPMO for project management and implementation; and (iv) provide counterpart funding. Their role in procurement process is not significant compared to the CSPMO and project implementing units (PIUs), who actually implement the project on behalf of three implementing agencies.

7. **Project implementing unit.** A state-owned company specialized in urban infrastructure construction was assigned in each Chuxiong City, Lufeng County, and Wuding County as a project implementing unit. Assisted by the tendering company engaged under the CSPMO, the project implementing units will actually conduct the procurement process on behalf of the implementing agency. The role of the PIUs include: (i) engagement of contractors and procure equipment with assistance of the international tendering agency, (ii) administration and monitoring of contractors and suppliers, (iii) supervision of construction and quality control, and (iv) reporting to the CSPMO, the project city, and county PMOs. The procurement capacity of the PIUs is critical as they are engaging all contractors and goods suppliers under the project.

## **E. Procurement Capacity Assessment**

8. Detailed procurement capacity assessments focused on the CSPMO and each PIU because they have a primary role in engaging consulting services, goods suppliers and/or contractors under the project. For the CSPMO and the PIUs, the procurement capacity is evaluated through interviews and the questionnaire as divided into five subsections: (i) general resources—staffing and equipment, (ii) procurement processes for goods and works—preparation of bid documents and tendering process, (iii) procurement processes for consulting services—consultant selection procedure, (iv) process oversight and control checks-and-balance and contract administration, and (v) record keeping.

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<sup>1</sup> In the PRC, the procurement under IFI-funded projects is handled through a certified procurement agent system, which requires the project executing agency to engage a certified international tendering company as its agent to handle the loan-funded procurement operations. The procurement agent is engaged through national competitive procedures. The service is normally financed by domestic funding sources. The qualification of the certified international tendering companies is subject to the licensing requirements of the PRC government.

## 1. Executing Agency

9. A questionnaire was sent and analyzed to assess the procurement capacity of the CSPMO (Table 2). The CSPMO was established under the Chuxiong Yi Autonomous State Government (CSG) through an executive order dated July 19, 2011 (No 196–2011). The CSPMO is headed by the director of Chuxiong State Finance Bureau, and deputy directors from Chuxiong State Housing and Construction Bureau, Chuxiong State Development and Reform Commission, and Chuxiong State Development and Investment Company. Seven fulltime staff including a fulltime deputy director are assigned to the CSPMO in-charge of the project implementation.

10. **Assessment of general resources.** The CSPMO staff have certain experience with the procurement of urban infrastructure development for domestic funded project, but they do not have procurement experience with projects financed by international financial institutes (IFIs). Training and external support will be necessary for the CSPMO staff to learn and develop appropriate procurement capacity to ensure that they could be adequately coordinated and guided for the project procurement process.

11. The capacity constraint due to inadequacy of experience and knowledge of procurement staff could result in delays in coordinating engineering design, bidding document preparation, bidding process, and bidding evaluation during the procurement process. The project implementation consulting service should have a procurement specialist for successful implementation of the project. The project implementation consulting service should be engaged directly by CSPMO to provide additional resources in assisting the CSG and PIUs in complying with ADB's procurement guidelines. Even before the engagement of the project implementation consulting service, additional procurement support by a startup consultant, especially in bidding document preparation, may be considered to provide hands-on training to the CSPMO at the early stage of project implementation.

12. **Assessment of procurement process for goods and works.** Responses to the questionnaire indicated that a systematic process is not yet fully in-place for preparing bid documents, bids evaluation, and contract award. CSPMO lacks procurement experience for IFI-funded projects. CSPMO is recommended to engage both a design institute and a tendering company to assist in the preparation of the bidding documents and bidding process. Following a common practice in the PRC, a design institute will finalize the detailed design with engineering drawings, and prepare bills of quantities as the technical parts of the bidding documents; while a tendering company will prepare the commercial part of the bidding documents. However, since bidding documents under an IFI-funded project require more detailed technical specifications and bills of quantities, an extensive support from ADB shall be provided to ensure the implementation of the project. This can be done by including an experienced procurement specialist both in the project implementation consulting service and in the startup consulting service package to help in the bidding process. The 'bid evaluation committee' composed of the owner's representatives and selected experts external to the organization will evaluate the responsiveness of the bids and determine the successful bidder. The procedure which the CSPMO is familiar with is in principle same. The CSPMO should receive a capacity building training to understand requirements of ADB procurement process under each process.

13. During project implementation, the project implementation consulting service and the startup consultant should provide on-the-job training on procurement, review the design documents from the design institute, and provide assistance to prepare and review the bid documents, and update them using ADB standard bidding documents to ensure compliance with ADB requirements and in addressing ADB's comments during the tendering process.

14. **Assessment of procurement process for consulting services.** Based on discussions and interviews of the CSPMO management and staff, it is concluded that they are familiar with the domestic procurement process for recruiting consulting services. They have well-established national and local guidelines and regulations to engage consultants for the domestic consulting services. However, CSPMO has no experience in procuring a consulting firm for implementation under an IFI-funded project. It is suggested that the project will provide timely and appropriate capacity development to provide guidance to the CSPMO. The early mobilization of the project implementation consulting service is preferable but it is even beneficial to have a separate startup consultant to assist the CSPMO for project management consulting service engagement.

15. **Assessment of progress control and oversight.** Based on interviews and surveys, as well as procurement trainings provided under the project preparatory technical assistance, the following control and oversight will be established:

- (i) separate agencies involved in approving bid documents, tender recommendations;
- (ii) setup of a systematic procedures for dealing with invoicing, payment and non-payment; and
- (iii) declaration of conflict of interest in procurement process.

16. Since the project will be the first case for the CSPMO to recruit consulting services for an IFI-funded project, close monitoring and detailed instructions to the CSPMO will be required. Additional controls by ADB through its reviews and approvals of bidding documents, instructions to the bidding process and contracts will help to ensure fairness and openness in procurement and compliance with ADB's procurement principles.

17. **Assessment of record keeping.** The questionnaire survey revealed that a record system is established for safekeeping original contracts, copies of bids and bid evaluation, and contract administration documents. However, the importance of book keeping and clearly defined filing system shall be enhanced through capacity development and training.

## **2. Project Implementing Units**

18. The PIU for the Chuxiong urban infrastructure and environment improvement subproject is Chuxiong Development and Investment Company Limited (CDIC). CDIC is responsible for the construction of the subcomponents of Longchuan River rehabilitation and Chuxiong southeastern area urban roads with related municipal services. CDIC is a state-owned company established by Chuxiong City Government in 2004 for urban infrastructure development, real estate development, municipal services, and other business activities. Currently 33 fulltime staff in 7 departments are in divisions in-charge of finance, marketing, project management, accounting, and human resource. The company is familiar with general procurement process for domestic construction projects, but it does not have any experience working with an IFI-funded project.<sup>2</sup>

19. The PIU for the Lufeng urban infrastructure and environment improvement subproject is Lufeng Urban Construction and Investment Company (LUCIC). LUCIC is responsible for the implementation of the subcomponents of East and West rivers rehabilitation, and urban roads with

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<sup>2</sup> The common domestic practice for urban infrastructure construction does not require the owner (i.e., EA/IA/PIU) to be involved in the bidding document preparation as those are prepared by the design institute and the tendering company. However, for IFI-funded projects, the owner are required in preparation of comprehensive technical bidding documents including bills of quantities, specifications, and construction drawings.



related municipal services in the northern Lufeng urban area. LUCIC is a state-owned company established by Lufeng County Government in 2004. The main business focus is to assist the county government to implement urban development, urban infrastructure and municipal service facility construction, real estate development and other business activities. There are total of 26 fulltime staff. The company staff is very experienced in domestic procurement process but does not have any experience with in an IFI-funded project.

20. The PIU for the Wuding urban infrastructure and environment improvement subproject is Wuding Urban Construction and Investment Company (WUCIC). WUCIC is responsible for the implementation of the subcomponents of Wulong river rehabilitation and urban roads and municipal services in the northern part of Wuding urban area. There are a total 20 fulltime staff in four departments including financial, project management, engineering, and administration offices. The company staff are familiar with domestic procurement process but do not have any experience in handling procurement for an IFI-funded project.

21. Based on the questionnaire, the procurement capacities of all PIUs have been assessed and evaluated in the five aspects, and the results are summarized below (Table 3–5).

22. **Assessment of general resources.** The staff from all PIUs have certain experience with the procurement of urban infrastructure development for domestic funded project with similar size and nature, but they do not have experience for procurement for an IFI-funded project. The staff have the basic capacity of following the procurement process, and are gaining knowledge of ADB's procurement procedures including bidding document preparation, bidding process and bid evaluation through the training conducted during the project preparatory technical assistance.

23. **Assessment of procurement processes for goods and works.** The staff from all PIUs are familiar with domestic procurement process and experienced dealing with domestic urban development projects. However, similar to the staff of the CSPMO, the questionnaire survey indicated a lack of systematic process for preparing bid documents, bids evaluation, and contract award. In particular, the staff have relatively weak capacity for bidding document preparation and bid evaluation documents for ADB's approval. It is important to include an experienced procurement specialist both in the startup consultant package as well as in the project implementation consulting service.

24. **Assessment on procurement process for consulting services.** The questionnaire survey concluded that the management staff from the three PIUs have limited experience in recruiting consulting service for domestic projects. However, it should also be noted that no consulting service packages will be procured by the PIUs under the project.

25. **Assessment of process control and oversight.** Based on interviews and surveys, the PIUs will establish control and oversight similar to the CSPMO as follows:

- (i) separate agencies involving in approving bid documents, tender recommendations;
- (ii) set a standard procedure for dealing with invoicing, payment and non-payment; and
- (iii) declaration of conflict of interest in procurement process.

26. **Assessment of record keeping.** Similar to CSPMO, it appears that a reasonable record system is in place for safekeeping the original contracts, copies of bids and bid evaluation, and contract administration documents. However, the importance of book keeping and clearly defined

filing system shall be created within the PIUs and the filing system shall be enhanced through capacity development and training.

27. There are two aspects to procurement capacity for the PIUs. First, their institutional setup, resources, and technical knowledge should be further strengthened to handle the procurement processes under the project. Second, it is necessary to examine the current procurement processes adopted to see how well these are aligned with ADB's Procurement Guidelines (2013, as amended from time to time). The PIUs' main role in the project is to procure contractors and goods suppliers in accordance with the ADB's relevant procurement guidelines, and implement comprehensive contract managements. The assessment indicates that all PIUs have some relevant experience from their domestic procurements, but lack the experience and knowledge for the procurement of goods and works for an IFI-funded project.

28. It should also be noted that these PIUs follow the procurement processes spelled out in PRC governing documents, notably the 'PRC Tendering Law' in accordance with established administrative procedures. Key processes adopted relating to procurement of contractors for goods and works are as follows:

- (i) design institute to develop construction drawings, bills of quantities, and a brief technical design notes, which is far too simplified in comparison to the full contract technical specifications used in the developed countries;
- (ii) tendering agency to draft commercial part of the bidding documents following ADB standard;
- (iii) CSPMO to approve contract documents;
- (iv) tender evaluation by a committee composed of the PIU and selected experts independent to the project;
- (v) there is a need for personnel involved to declare any potential conflict of interest during the bid evaluation process;
- (vi) requirement for written narratives for procurement decisions during the bid evaluation process;
- (vii) monitoring of contractual performance and fulfillment of payment obligations by PIUs; and
- (viii) requirement for safe keeping of original contract and contract correspondence by both CSPMO and PIUs.

## **F. Summary of Assessment and Recommendations**

29. The CSPMO is responsible for the procurement of the consulting services for the project implementation, and the CSPMO is also responsible to provide direct guidance to the PIUs to procure all construction and goods supply contracts for the three subprojects, and provides oversight of contract management. The CSPMO will coordinate and manage the preparation of bid documents by the design institute (technical part) and the tendering company (commercial part), organize bid evaluation, coordinate for contract award and signing of contracts. Subsequently the CSPMO, together with the each city and county PMO, will coordinate with PIUs to provide contract administration and record keeping. The PIUs under the guidance of CSPMO will carry out

procurement preparation activities and contract management activities, including working with the design institute and the loan implementation consultant to prepare the technical part of the bidding documents, provide project specified contract document requirements, construction and contract management and construction supervision.

30. Based on the evaluation of the CSPMO and PIUs and the responses to the procurement capacity questionnaires, the general findings of the assessment are as follows:

- (i) The CSPMO and the PIUs have established procurement units/divisions, and the staff are generally experienced in procurement for domestic urban infrastructure projects, but they do not have procurement experience for an IFI-funded project.
- (ii) The CSPMO has certain experience in procurement for consulting service contracts for domestic projects, but they have not procured and processed any consulting services for an IFI-funded project.
- (iii) The PIUs have adequate technical resources to handle procurement of goods suppliers and contractors, and to manage their contracts. Their capacity, however, should be further strengthened to meet all requirements under the ADB's procurement guidelines.
- (iv) Rules and regulations will be setup within CSPMO and PIUs for handling the various stages of procurement (e.g., bid document preparation, bid evaluation, contract award, and administration) ensuring economy, efficiency and transparency during the procurement process. A systematic record keeping and filing will be necessary as there is no detail procurement manual to guide detail operations.
- (v) This is the first IFI-funded project for CSPMO, (and project city and county PMOs) and PIUs. A comprehensive capacity development support is required including advance contracting and retrospective financing.

31. Based on the above assessment for the current procurement capacity for CSPMO and PIUs, the potential risks and other constraints associated with procurement are summarized as follows:

- (i) Due to lack of procurement capacity in dealing with an IFI-funded project, it is expected to take longer time for the CSPMO and PIUs to learn and to be familiar with ADB's procurement policies and procedure, especially during the early stage of the project implementation including the contracts for advance contracting and retroactive financing.
- (ii) As the CSPMO and PIUs have no international procurement experience and have staff with limited English ability, it is challenging to prepare high quality English bidding documents for international competitive bidding process.
- (iii) Lack of a detailed procurement manual in the CSPMO and PIUs make it difficult to ensure all work performed by different PIUs are consistent and with the same format and quality. This may make supervision and coordination difficult.
- (iv) The CSPMO and PIUs as well as the design institute do not have experience in preparing bidding documents fulfilling ADB's procedural requirements since the comprehensive technical bidding documents are not required for common domestic projects.

32. Based on the assessment and previous working experience with the city and county governments in similar size and natures, the following recommended measures to mitigate risks and facilitate procurement are proposed:

- (i) CSPMO is designated to lead the overall procurement process and is responsible for

- quality control of each procurement process.
- (ii) A startup consultant for procurement is engaged to provide a support to CSPMO and PIUs at an early stage of project implementation.
  - (iii) The project implementation consulting service includes a procurement specialist, who will conduct comprehensive procurement capacity development trainings, provide on-the-job training to CSPMO and PIUs procurement staff on ADB requirements and procedures, and assist in terms of detailed design and bid documents review, bid evaluation report preparation, and addressing ADB's comments on relevant documents.
  - (iv) The training for procurement capacity provided during the project preparation stage should be continued and enhanced for the CSPMO and PIUs staff so that they will be familiar with the ADB procurement policies and procedures to ensure efficient implementation of the project.
  - (v) An experienced tendering company with good track records of handling IFI-funded projects is engaged to assist the CSPMO for the overall procurement process.
  - (vi) Prior review will be required for all ICB contracts, the first NCB contract for civil works, and the first NCB contract for goods for each project city and county government. Post review can be used to other procurement packages.
  - (vii) Yunnan provincial government has rich experience in handling many IFI-funded projects and their procurement process. The guidance, support and knowledge transfer from the Yunnan provincial government is a key for success.<sup>3</sup>

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<sup>3</sup> Yunnan provincial government is committed to provide procurement support especially in transferring the knowledge and experience from other project management offices handling ADB-funded and World Bank-funded projects.

**Table 2: Capacity Assessment Questionnaire–Chuxiong State PMO**

<b>Part A: General Resource Assessment</b>	<b>Response</b>
A.1. Is there a procurement department?	Yes
A.2. What procurement does it undertake?	Works, consulting service
A.3. Are the staff provided with written job descriptions?	No
A.4. How many years experience does the head of the procurement unit have in a direct procurement role?	Six years
A.5. How many staff in the procurement department are:	
(i) Full Time?	
(ii) Part Time?	Two
(iii) Seconded?	
A.6. At what level does the department report (to the head of agency, deputy etc.)?	Head of agency
A.7. Do the staff that will be involved with the procurement have English language skills sufficient to undertake international procurement?	No
A.8. Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	No
A.9. Does the unit have adequate facilities such as PCs, internet connections, photocopy facilities, printers etc. to undertake the expected procurement?	Yes
A.10. Is there a procurement training program?	Yes
<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.1. Has the agency undertaken foreign assisted procurement of goods or works recently (last 12 months, or last 36 months)? (If yes funded by whom and name of the Project)	No
B.2. If the above is yes, what were the major challenges?	N/A
B.3. Is there a procurement process manual for goods and works?	Yes
B.4. If there is a manual is it up to date and does it cover foreign assisted procurement?	Yes
B.5. Is there a systematic process to identify procurement requirements (1 year or more)?	No
B.6. Who drafts the specifications?	N/A
B.7. Who approves the specification?	N/A
B.8. Are there standard bidding documents in use and have they been approved for use on ADB funded projects?	No
B.9. Who drafts the bidding documents?	Bidding agency for commercial part, nobody for technical part
B.10. Who manages the sale of the document?	PMO
B.11. Are all queries from bidders replied to in writing?	Yes
B.12. Is there a minimum period for preparation of bids and if yes how long?	20 days
B.13. Does the bidding document state the date and time of opening and how close is it to the deadline for submission?	28 days
B.14. Is the opening public?	No
B.15. Can late bids be accepted?	No
B.16. Can bids be rejected at bid opening?	No
B.17. Are minutes taken?	Yes

<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.18. Who may have a copy of the minutes?	The trading center
B.19. Are the minutes free of charge?	Yes
B.20. Who undertakes the evaluation (individual(s), permanent committee, ad-hoc committee)?	Selected experts from the pool of experts, and IA representatives
B.21. What are the qualifications of the evaluators in respect to procurement and the goods and works under evaluation?	Experts from the pool of experts
B.22. Is the decision of the evaluators final or is the evaluation subject to additional approvals?	It's final
B.23. Using at least three real examples how long between the issue of the invitation for bids and contract effectiveness?	32 days
B.24. Are there processes in place for the collection and clearance of cargo through ports of entry?	No
B.25. Are there established goods receiving procedures?	No
B.26. Are all goods received recorded as assets or inventory in a register or similar?	Yes
B.27. Is the agency / procurement department familiar with letters of credit?	No
B.28. Does the procurement department register and track warranty and latent defects liability periods?	Yes
<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.1. Has the agency undertaken foreign assisted procurement of consulting services recently (last 12 months, or last 36 months)?	No
C.2. If the above is yes what were the major challenges?	N/A
C.3. Is there a procurement process manual for consulting services procurement?	Yes
C.4. Is the manual up to date and does it cover foreign assisted projects?	Yes
C.5. Who identifies the need for consulting services requirements?	EA/PMO and IAs
C.6. Who drafts the ToR?	PPMO, IA and bidding agency
C.7. Do the ToR follow a standard format such as background, tasks, inputs, objectives and outputs?	No
C.8. Who prepares the request for proposals?	PPMO
C.9. Are assignments advertised and expressions of interest called for?	Yes
C.10. Is a consultants' selection committee formed with appropriate individuals in terms of procurement and technical expertise?	Yes
C.11. What criteria are used to evaluate EOIs?	Commitment and cost
C.12. Historically what is the most common method used (QCBS, QBS etc.)?	QBS
C.13. Do firms have to pay for the proposal document?	Some firms do
C.14. Do the evaluative criteria follow a pre-determined structure and are they detailed in the RFP?	No
C.15. Are pre-proposal visits and meetings arranged?	No
C.16. Are minutes prepared and circulated after pre-proposal meetings?	No
C.17. To who are minutes distributed?	Attendants
C.18. Are all queries from consultants answered to in writing?	Yes
C.19. Are the financial and technical proposals in separate envelopes?	Yes
C.20. Are proposal securities required?	No
C.21. Are technical proposals opened in public?	No
C.22. Do the financial proposals remain sealed until technical evaluation is completed?	Yes
C.23. Are minutes of technical opening distributed?	Yes

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.24. Who determines the final technical ranking and how?	Experts committee, and by the scores
C.25. Are the technical scores published and sent to all firms?	No
C.26. Is the financial proposal open in public?	No
C.27. Are there minutes taken and distributed of financial proposal opening?	Yes
C.28. How is the financial evaluation completed?	Use the procedure and formula in the bidding documents to calculate
C.29. Are face to face contract negotiations held?	Yes
C.30. How long after financial evaluation is the selected firm to negotiate?	7 days
C.31. What is the usual basis for negotiation?	Bidding documents and other related documents
C.32. Are minutes of negotiation taken and signed?	No
C.33. How long after negotiations until the contract is signed?	Within 30 days
C.34. Are advance payments made?	Yes
C.35. Is there an evaluation system for measuring the outputs of consultants?	No
<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.1. Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes
D.2. Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	No
D.3. Is the commencement of procurement dependent on external approvals (formal or de-facto) outside of the budgeting process?	No
D.4. Who approves procurement transactions and do they have procurement experience and qualifications?	Authority
D.5. Which of the following actions require approval outside of the procurement unit or a permanent evaluation committee and who grants the approval?	Varies from case to case
(i) Bidding document, invitation to pre-qualify or request for proposal	
(ii) Advertisement of an invitation for bids, pre-qualification or call for expressions of interest	
(iii) Evaluation reports	
(iv) Notice of award	
(v) Invitation to consultants to negotiate	
(vi) Contracts	
D.6. Is contractual performance systematically monitored and reported upon?	Yes
D.7. Does the agency monitor and track its contractual payment obligations?	Yes
D.8. On average how long is it between receiving a firm's invoice and making payment?	Within 5 days
D.9. What is the standard period for payment included in contracts?	
D.10. When payment is made late are the beneficiaries paid interest?	No
D.11. Are payments authorized by the same individuals empowered to approve invitation documents, evaluations and contracts?	Yes
D.12. Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes
D.13. Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Yes
D.14. Is there a formal non-judicial mechanism for dealing with complaints?	Yes
D.15. Is a complaints resolution mechanism described in national procurement documents?	Not seen

<b>Part E: Records Keeping</b>	<b>Response</b>
E.1. Is there a referencing system for procurement files?	Yes
E.2. Are original contracts secured in a fire and theft proof location?	Yes
E.3. Are copies of bids or proposals retained with the evaluation?	Yes
E.4. Are copies of the original advertisements retained with the pre-contract papers?	No
E.5. Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	no
E.6. Are copies of invoices included with contract papers?	No
E.7. For what period are records kept?	Permanent

**Table 3: Capacity Assessment Questionnaire –Chuxiong Development and Investment Company Limited**

<b>Part A: General Resource Assessment</b>	<b>Response</b>
A.1. Is there a procurement department?	No
A.2. What procurement does it undertake?	Works procurement
A.3. Are the staff provided with written job descriptions?	To participate in the bid evaluation
A.4. How many years experience does the head of the procurement unit have in a direct procurement role?	15 (agency head)
A.5. How many staff in the procurement department are:	
(i) Full Time?	
(ii) Part Time?	5
(iii) Seconded?	
A.6. At what level does the department report (to the head of agency, deputy etc.)?	Head of agency
A.7. Do the staff that will be involved with the procurement have English language skills sufficient to undertake international procurement?	No
A.8. Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	yes
A.9. Does the unit have adequate facilities such as PCs, internet connections, photocopy facilities, printers etc. to undertake the expected procurement?	Yes
A.10. Is there a procurement training program?	No
<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.1. Has the agency undertaken foreign assisted procurement of goods or works recently (last 12 months, or last 36 months)? (If yes funded by whom and name of the Project)	No
B.2. If the above is yes, what were the major challenges?	N/A
B.3. Is there a procurement process manual for goods and works?	No
B.4. If there is a manual is it up to date and does it cover foreign assisted procurement?	No



<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.5. Is there a systematic process to identify procurement requirements (1 year or more)?	No
B.6. Who drafts the specifications?	Bidding agency
B.7. Who approves the specification?	Bidding agency
B.8. Are there standard bidding documents in use and have they been approved for use on ADB funded projects?	No
B.9. Who drafts the bidding documents?	Bidding agency
B.10. Who manages the sale of the document?	Bidding agency
B.11. Are all queries from bidders replied to in writing?	Yes
B.12. Is there a minimum period for preparation of bids and if yes how long?	One month
B.13. Does the bidding document state the date and time of opening and how close is it to the deadline for submission?	Yes, and 30 days
B.14. Is the opening public?	No
B.15. Can late bids be accepted?	No
B.16. Can bids be rejected at bid opening?	Yes
B.17. Are minutes taken?	Yes
B.18. Who may have a copy of the minutes?	Tenderee, tenderer, bidding agent, experts for bid evaluation
B.19. Are the minutes free of charge?	Yes
B.20. Who undertakes the evaluation (individual(s), permanent committee, ad-hoc committee)?	Permanent committee
B.21. What are the qualifications of the evaluators in respect to procurement and the goods and works under evaluation?	Registered cost engineer, registered tendering specialist
B.22. Is the decision of the evaluators final or is the evaluation subject to additional approvals?	No
B.23. Using at least three real examples how long between the issue of the invitation for bids and contract effectiveness?	
B.24. Are there processes in place for the collection and clearance of cargo through ports of entry?	No
B.25. Are there established goods receiving procedures?	Yes
B.26. Are all goods received recorded as assets or inventory in a register or similar?	Yes
B.27. Is the agency / procurement department familiar with letters of credit?	Yes
B.28. Does the procurement department register and track warranty and latent defects liability periods?	Yes

<b>Part C: Procurement Processes: Consulting Services</b>		<b>Response</b>
C.1.	Has the agency undertaken foreign assisted procurement of consulting services recently (last 12 months, or last 36 months)?	Haven't entrusted any agency, not sure
C.2.	If the above is yes what were the major challenges?	Haven't entrusted any agency, not sure
C.3.	Is there a procurement process manual for consulting services procurement?	Haven't entrusted any agency, not sure
C.4.	Is the manual up to date and does it cover foreign assisted projects?	Haven't entrusted any agency, not sure
C.5.	Who identifies the need for consulting services requirements?	National laws and regulations, and supervisor's requirement
C.6.	Who drafts the ToR?	Chuxiong Kaitou
C.7.	Do the ToR follow a standard format such as background, tasks, inputs, objectives and outputs?	Yes
C.8.	Who prepares the request for proposals?	Don't know
C.9.	Are assignments advertised and expressions of interest called for?	No
C.10.	Is a consultants' selection committee formed with appropriate individuals in terms of procurement and technical expertise?	Yes
C.11.	What criteria are used to evaluate EOIs?	Don't know
C.12.	Historically what is the most common method used (QCBS, QBS etc.)?	Don't know
C.13.	Do firms have to pay for the proposal document?	Don't know
C.14.	Do the evaluative criteria follow a pre-determined structure and are they detailed in the RFP?	Yes
C.15.	Are pre-proposal visits and meetings arranged?	No
C.16.	Are minutes prepared and circulated after pre-proposal meetings?	Yes
C.17.	To who are minutes distributed?	People concerned and people who requested to have it
C.18.	Are all queries from consultants answered to in writing?	Yes
C.19.	Are the financial and technical proposals in separate envelopes? (	Yes
C.20.	Are proposal securities required?	Yes
C.21.	Are technical proposals opened in public?	Yes
C.22.	Do the financial proposals remain sealed until technical evaluation is completed?	Yes
C.23.	Are minutes of technical opening distributed?	Yes
C.24.	Who determines the final technical ranking and how?	Bid evaluation experts according to the bidding document

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.25. Are the technical scores published and sent to all firms?	Yes
C.26. Is the financial proposal open in public?	Yes
C.27. Are there minutes taken and distributed of financial proposal opening?	Yes
C.28. How is the financial evaluation completed?	According to the bidding document
C.29. Are face to face contract negotiations held?	Yes
C.30. How long after financial evaluation is the selected firm to negotiate?	Within 30 days
C.31. What is the usual basis for negotiation?	Bidding documents, bid-winning notice, etc
C.32. Are minutes of negotiation taken and signed?	Yes
C.33. How long after negotiations until the contract is signed?	Immediate
C.34. Are advance payments made?	yes
C.35. Is there an evaluation system for measuring the outputs of consultants?	Don't know
<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.1. Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes
D.2. Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Challenge system
D.3. Is the commencement of procurement dependent on external approvals (formal or de-facto) outside of the budgeting process?	No, record needs to be kept
D.4. Who approves procurement transactions and do they have procurement experience and qualifications?	Don't require approval, but records need to be kept, they have the experience, but no qualifications
D.5. Which of the following actions require approval outside of the procurement unit or a permanent evaluation committee and who grants the approval?	
(i) Bidding document, invitation to pre-qualify or request for proposal	IA
(ii) Advertisement of an invitation for bids, pre-qualification or call for expressions of interest	IA
(iii) Evaluation reports	IA
(iv) Notice of award	IA
(v) Invitation to consultants to negotiate	IA
(vi) Contracts	IA
D.6. Is contractual performance systematically monitored and reported upon?	Yes
D.7. Does the agency monitor and track its contractual payment obligations?	Yes
D.8. On average how long is it between receiving a firm's invoice and making payment?	Immediate
D.9. What is the standard period for payment included in contracts?	

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
D.10. When payment is made late are the beneficiaries paid interest?	Yes
<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.11. Are payments authorized by the same individuals empowered to approve invitation documents, evaluations and contracts?	Yes
D.12. Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes
D.13. Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default / withheld payment?	Yes
D.14. Is there a formal non-judicial mechanism for dealing with complaints?	Yes
D.15. Is a complaints resolution mechanism described in national procurement documents?	Yes
<b>Part E: Records Keeping</b>	<b>Response</b>
E.1. Is there a referencing system for procurement files?	Yes
E.2. Are original contracts secured in a fire and theft proof location?	Yes
E.3. Are copies of bids or proposals retained with the evaluation?	Yes
E.4. Are copies of the original advertisements retained with the pre-contract papers?	No
E.5. Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Yes
E.6. Are copies of invoices included with contract papers?	Yes
E.7. For what period are records kept?	5 years or permanent

**Table 4: Capacity Assessment Questionnaire – Lufeng Urban Construction and Investment Company**

<b>Part A: General Resource Assessment</b>	<b>Response</b>
A.1. Is there a procurement department?	Yes
A.2. What procurement does it undertake?	Construction material, equipment
A.3. Are the staff provided with written job descriptions?	Yes
A.4. How many years experience does the head of the procurement unit have in a direct procurement role?	Two
A.5. How many staff in the procurement department are:	
(i) Full Time?	Three
(ii) Part Time?	
(ii) Seconded?	
A.6. At what level does the department report (to the head of agency, deputy etc.)?	Head of agency

<b>Part A: General Resource Assessment</b>	<b>Response</b>
A.7. Do the staff that will be involved with the procurement have English language skills sufficient to undertake international procurement?	No
A.8. Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	No
A.9. Does the unit have adequate facilities such as PCs, internet connections, photocopy facilities, printers etc. to undertake the expected procurement?	Yes
A.10. Is there a procurement training program?	Yes
<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.1. Has the agency undertaken foreign assisted procurement of goods or works recently (last 12 months, or last 36 months)? (If yes funded by whom and name of the Project)	No
B.2. If the above is yes, what were the major challenges?	N/A
B.3. Is there a procurement process manual for goods and works?	No
B.4. If there is a manual is it up to date and does it cover foreign assisted procurement?	No
B.5. Is there a systematic process to identify procurement requirements (1 year or more)?	No
B.6. Who drafts the specifications?	Unknown
B.7. Who approves the specification?	Unknown
B.8. Are there standard bidding documents in use and have they been approved for use on ADB funded projects?	There is a standard bidding document in use
B.9. Who drafts the bidding documents?	Bidding agency
B.10. Who manages the sale of the document?	Bidding agency
B.11. Are all queries from bidders replied to in writing?	Yes
B.12. Is there a minimum period for preparation of bids and if yes how long?	Yes, 30 days
B.13. Does the bidding document state the date and time of opening and how close is it to the deadline for submission?	Yes, 15–30 days
B.14. Is the opening public?	Yes
B.15. Can late bids be accepted?	No
B.16. Can bids be rejected at bid opening?	Yes
B.17. Are minutes taken?	Yes
B.18. Who may have a copy of the minutes?	Bid winner
B.19. Are the minutes free of charge?	No
B.20. Who undertakes the evaluation (individual(s), permanent committee, ad-hoc committee)?	Permanent committee

<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.21. What are the qualifications of the evaluators in respect to procurement and the goods and works under evaluation?	Professional and technical titles in project construction, economics, finance
B.22. Is the decision of the evaluators final or is the evaluation subject to additional approvals?	It's final
B.23. Using at least three real examples how long between the issue of the invitation for bids and contract effectiveness?	30 days
B.24. Are there processes in place for the collection and clearance of cargo through ports of entry?	No
B.25. Are there established goods receiving procedures?	Yes
B.26. Are all goods received recorded as assets or inventory in a register or similar?	Yes
B.27. Is the agency / procurement department familiar with letters of credit?	Yes
B.28. Does the procurement department register and track warranty and latent defects liability periods?	Yes
<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.1. Has the agency undertaken foreign assisted procurement of consulting services recently (last 12 months, or last 36 months)?	No
C.2. If the above is yes what were the major challenges?	
C.3. Is there a procurement process manual for consulting services procurement?	No
C.4. Is the manual up to date and does it cover foreign assisted projects?	No
C.5. Who identifies the need for consulting services requirements?	Department supervisor
C.6. Who drafts the ToR?	Department supervisor
C.7. Do the ToR follow a standard format such as background, tasks, inputs, objectives and outputs?	Yes
C.8. Who prepares the request for proposals?	Procurement department
C.9. Are assignments advertised and expressions of interest called for?	Yes
C.10. Is a consultants' selection committee formed with appropriate individuals in terms of procurement and technical expertise?	No
C.11. What criteria are used to evaluate EOIs?	Quality, reputation and price
C.12. Historically what is the most common method used (QCBS, QBS etc.)?	QCBS
C.13. Do firms have to pay for the proposal document?	No
C.14. Do the evaluative criteria follow a pre-determined structure and are they detailed in the RFP?	Yes

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.15. Are pre-proposal visits and meetings arranged?	Yes
C.16. Are minutes prepared and circulated after pre-proposal meetings?	Yes
C.17. To whom are minutes distributed?	Chairman, general manager
C.18. Are all queries from consultants answered to in writing?	Yes
C.19. Are the financial and technical proposals in separate envelopes?	Yes
C.20. Are proposal securities required?	No
C.21. Are technical proposals opened in public?	No
C.22. Do the financial proposals remain sealed until technical evaluation is completed?	Yes
C.23. Are minutes of technical opening distributed?	No
C.24. Who determines the final technical ranking and how?	Permanent committee, according to the evaluation criteria
C.25. Are the technical scores published and sent to all firms?	No
C.26. Is the financial proposal open in public?	Yes
C.27. Are there minutes taken and distributed of financial proposal opening?	Yes
C.28. How is the financial evaluation completed?	
C.29. Are face to face contract negotiations held?	Yes
C.30. How long after financial evaluation is the selected firm to negotiate?	Within 3 days
C.31. What is the usual basis for negotiation?	Bid-winning notice
C.32. Are minutes of negotiation taken and signed?	Yes
C.33. How long after negotiations until the contract is signed?	Within 3 days
C.34. Are advance payments made?	Yes
C.35. Is there an evaluation system for measuring the outputs of consultants?	No
<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.1. Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes
D.2. Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes
D.3. Is the commencement of procurement dependent on external approvals (formal or de-facto) outside of the budgeting process?	Yes
D.4. Who approves procurement transactions and do they have procurement experience and qualifications?	County Government Office, and yes
D.5. Which of the following actions require approval outside of the procurement unit or a permanent evaluation committee and who grants the approval?	
(i) Bidding document, invitation to pre-qualify or request for proposal	County Government

<b>Part D: Process Oversight and Control</b>	<b>Response</b>
(ii) Advertisement of an invitation for bids, pre-qualification or call for expressions of interest	County Government
(iii) Evaluation reports	
(iv) Notice of award	
(v) Invitation to consultants to negotiate	
(vi) Contracts	
D.6. Is contractual performance systematically monitored and reported upon?	Yes
D.7. Does the agency monitor and track its contractual payment obligations?	No
D.8. On average how long is it between receiving a firm's invoice and making payment?	Five working days
D.9. What is the standard period for payment included in contracts?	Schedule payment according to the contract
D.10. When payment is made late are the beneficiaries paid interest?	Yes
D.11. Are payments authorized by the same individuals empowered to approve invitation documents, evaluations and contracts?	Yes
D.12. Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes
D.13. Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default / withheld payment?	Yes
D.14. Is there a formal non-judicial mechanism for dealing with complaints?	Yes
D.15. Is a complaints resolution mechanism described in national procurement documents?	Yes
<b>Part E: Records Keeping</b>	<b>Response</b>
E.1. Is there a referencing system for procurement files?	Yes
E.2. Are original contracts secured in a fire and theft proof location?	Yes
E.3. Are copies of bids or proposals retained with the evaluation?	Yes
E.4. Are copies of the original advertisements retained with the pre-contract papers?	Yes
E.5. Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Yes
E.6. Are copies of invoices included with contract papers?	Yes
E.7. For what period are records kept?	Permanent



**Table 5: Capacity Assessment Questionnaire – Wuding Urban Construction and Investment Company**

<b>Part A: General Resource Assessment</b>	<b>Response</b>
A.1. Is there a procurement department?	No
A.2. What procurement does it undertake?	Works
A.3. Are the staff provided with written job descriptions?	
A.4. How many years experience does the head of the procurement unit have in a direct procurement role?	15
A.5. How many staff in the procurement department are:	
(i) Full Time?	
(ii) Part Time?	5
(ii) Seconded?	
A.6. At what level does the department report (to the head of agency, deputy etc.)?	Head of agency
A.7. Do the staff that will be involved with the procurement have English language skills sufficient to undertake international procurement?	Yes
A.8. Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes
A.9. Does the unit have adequate facilities such as PCs, internet connections, photocopy facilities, printers etc. to undertake the expected procurement?	Yes
A.10. Is there a procurement training program?	Yes
<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.1. Has the agency undertaken foreign assisted procurement of goods or works recently (last 12 months, or last 36 months)? (If yes funded by whom and name of the Project)	No
B.2. If the above is yes, what were the major challenges?	N/A
B.3. Is there a procurement process manual for goods and works?	No
B.4. If there is a manual is it up to date and does it cover foreign assisted procurement?	
B.5. Is there a systematic process to identify procurement requirements (1 year or more)?	No
B.6. Who drafts the specifications?	Bidding agency
B.7. Who approves the specification?	Bidding agency
B.8. Are there standard bidding documents in use and have they been approved for use on ADB funded projects?	No
B.9. Who drafts the bidding documents?	Bidding agency
B.10. Who manages the sale of the document?	Bidding agency
B.11. Are all queries from bidders replied to in writing?	Yes

<b>Part B: Procurement Processes: Goods and Works</b>	<b>Response</b>
B.12. Is there a minimum period for preparation of bids and if yes how long?	One month
B.13. Does the bidding document state the date and time of opening and how close is it to the deadline for submission?	Yes, 30 days
B.14. Is the opening public?	No
B.15. Can late bids be accepted?	No
B.16. Can bids be rejected at bid opening?	Yes
B.17. Are minutes taken?	Yes
B.18. Who may have a copy of the minutes?	Tenderee, tenderer, bidding agent, experts for bid evaluation, supervision agency
B.19. Are the minutes free of charge?	Yes
B.20. Who undertakes the evaluation (individual(s), permanent committee, ad-hoc committee)?	Permanent committee
B.21. What are the qualifications of the evaluators in respect to procurement and the goods and works under evaluation?	Registered cost engineer, registered tendering specialist
B.22. Is the decision of the evaluators final or is the evaluation subject to additional approvals?	No
B.23. Using at least three real examples how long between the issue of the invitation for bids and contract effectiveness?	
B.24. Are there processes in place for the collection and clearance of cargo through ports of entry?	No
B.25. Are there established goods receiving procedures?	Yes
B.26. Are all goods received recorded as assets or inventory in a register or similar?	Yes
B.27. Is the agency / procurement department familiar with letters of credit?	Yes
B.28. Does the procurement department register and track warranty and latent defects liability periods?	Yes
<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.1. Has the agency undertaken foreign assisted procurement of consulting services recently (last 12 months, or last 36 months)?	Haven't entrusted any agency, not sure
C.2. If the above is yes what were the major challenges?	Haven't entrusted any agency, not sure
C.3. Is there a procurement process manual for consulting services procurement?	Haven't entrusted any agency, not sure
C.4. Is the manual up to date and does it cover foreign assisted projects?	Haven't entrusted any agency, not sure

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.5. Who identifies the need for consulting services requirements?	National laws and regulations, and supervisor's requirement
C.6. Who drafts the ToR?	Wuding PMO
C.7. Do the ToR follow a standard format such as background, tasks, inputs, objectives and outputs?	Yes
C.8. Who prepares the request for proposals?	Don't know
C.9. Are assignments advertised and expressions of interest called for?	No
C.10. Is a consultants' selection committee formed with appropriate individuals in terms of procurement and technical expertise?	Yes
C.11. What criteria are used to evaluate EOIs?	Don't know
C.12. Historically what is the most common method used (QCBS, QBS etc.)?	Don't know
C.13. Do firms have to pay for the proposal document?	Don't know
C.14. Do the evaluative criteria follow a pre-determined structure and are they detailed in the RFP?	Yes
C.15. Are pre-proposal visits and meetings arranged?	No
C.16. Are minutes prepared and circulated after pre-proposal meetings?	Yes
C.17. To who are minutes distributed?	People concerned and people who requested to have it
C.18. Are all queries from consultants answered to in writing?	Yes
C.19. Are the financial and technical proposals in separate envelopes? (	Yes
C.20. Are proposal securities required?	Yes
C.21. Are technical proposals opened in public?	Yes
C.22. Do the financial proposals remain sealed until technical evaluation is completed?	Yes
C.23. Are minutes of technical opening distributed?	Yes
C.24. Who determines the final technical ranking and how?	Bid evaluation experts according to the bidding document
C.25. Are the technical scores published and sent to all firms?	Yes
C.26. Is the financial proposal open in public?	Yes
C.27. Are there minutes taken and distributed of financial proposal opening?	Yes
C.28. How is the financial evaluation completed?	According to the bidding document
C.29. Are face to face contract negotiations held?	Yes
C.30. How long after financial evaluation is the selected firm to negotiate?	Within 30 days

<b>Part C: Procurement Processes: Consulting Services</b>	<b>Response</b>
C.31. What is the usual basis for negotiation?	Bidding documents, bid-winning notice, etc
C.32. Are minutes of negotiation taken and signed?	Yes
C.33. How long after negotiations until the contract is signed?	Immediate
C.34. Are advance payments made?	Yes
C.35. Is there an evaluation system for measuring the outputs of consultants?	Don't know
<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.1. Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes
D.2. Are those involved with procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Challenge system
D.3. Is the commencement of procurement dependent on external approvals (formal or de-facto) outside of the budgeting process?	No, but records need to be kept
D.4. Who approves procurement transactions and do they have procurement experience and qualifications?	Approval not required, but records need to be kept; they have the experience, but no qualifications
D.5. Which of the following actions require approval outside of the procurement unit or a permanent evaluation committee and who grants the approval?	
(i) Bidding document, invitation to pre-qualify or request for proposal	IA
(ii) Advertisement of an invitation for bids, pre-qualification or call for expressions of interest	IA
(iii) Evaluation reports	IA
(iv) Notice of award	IA
(v) Invitation to consultants to negotiate	IA
(vi) Contracts	IA
D.6. Is contractual performance systematically monitored and reported upon?	Yes
D.7. Does the agency monitor and track its contractual payment obligations?	Yes
D.8. On average how long is it between receiving a firm's invoice and making payment?	immediate
D.9. What is the standard period for payment included in contracts?	
D.10. When payment is made late are the beneficiaries paid interest?	Yes

<b>Part D: Process Oversight and Control</b>	<b>Response</b>
D.11. Are payments authorized by the same individuals empowered to approve invitation documents, evaluations and contracts?	Yes
D.12. Is there a written auditable trail of procurement decisions attributable to individuals and committees?	yes
D.13. Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default / withheld payment?	yes
D.14. Is there a formal non-judicial mechanism for dealing with complaints?	yes
D.15. Is a complaints resolution mechanism described in national procurement documents?	yes
<b>Part E: Records Keeping</b>	<b>Response</b>
E.1. Is there a referencing system for procurement files?	yes
E.2. Are original contracts secured in a fire and theft proof location?	yes
E.3. Are copies of bids or proposals retained with the evaluation?	yes
E.4. Are copies of the original advertisements retained with the pre-contract papers?	no
E.5. Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	yes
E.6. Are copies of invoices included with contract papers?	yes
E.7. For what period are records kept?	permanent