

FINANCIAL ANALYSIS

A. Introduction

1. This financial analysis comprises a fiscal sustainability analysis to assess the capacity of the final borrowers, Changshou District Government (CDG), Dianjiang County Government (DCG), and Liangping District Government (LDG), to provide sufficient funds for all incremental recurrent costs incurred by the project. Project financing is fully reliant on government budget resources. The financial analysis of the project was carried out in accordance with the Asian Development Bank (ADB) policies and guidelines for financial analysis of projects.¹

2. The project has four outputs: (i) flood risk management infrastructure constructed, (ii) wastewater management and pollution control infrastructure developed, (iii) ecological conservation facilities improved, and (iv) flood and environmental risk management capacity enhanced. The project outputs will (i) improve flood control facilities for Longxi River, (ii) enhance river water quality by connecting households to wastewater systems, (iii) improve the riparian and aquatic ecosystems of the Longxi River and its tributaries, and (iv) build the capacity of local governments in flood and environmental risk management.

B. Fiscal Analysis—Final Borrowers

3. The fiscal sustainability analysis for CDG, DCG, and LDG involves incremental recurrent costs analysis of all project components. CDG, DCG, and LDG will be the legal entities responsible for servicing the ADB loan and providing counterpart funding.

4. CDG, DCG, and LDG will be responsible for (i) servicing the ADB loan; (ii) all operation and maintenance (O&M) costs for project-financed facilities (ecological conservation facilities, wastewater collection pipes, and wastewater treatment O&M costs) after the extension of the wastewater collection network, and the flood protection infrastructure O&M costs; and (iii) providing counterpart funds during project implementation, and the debt service payments after project completion. Incremental costs and revenues associated with wastewater treatment operations are included in the fiscal sustainability analysis, as wastewater operations are not managed as independent self-financing enterprises and are subsidized out of government budgets.

5. For the fiscal sustainability analysis, the O&M cost, counterpart fund requirements, and debt service payments were compared with the projected revenues and expenditures of CDG, DCG, and LDG to assess the fiscal capacity. Two benchmarks for assessment of capacity were used: (i) CDG, DCG, and LDG have a fiscal surplus to absorb project incremental costs; and (ii) the project-related fiscal burden is acceptable, provided it does not exceed 2% of revenues.

6. The revenue and expenditure of CDG, DCG, and LDG were projected based on the historical data of the last 5 years (2012–2016). Then, the O&M cost, counterpart funds, and debt service payment were estimated and compared with the projected revenue and expenditure of CDG, DCG, and LDG during 2019–2028 to determine whether CDG, DCG, and LDG will be able to bear all the financial obligations during and after the project.

¹ ADB. 2014. *Financial Management, Cost Estimates, Financial Analysis, and Financial Performance Indicators. Operations Manual*. OM G2/BP. Manila; ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila; and ADB. 2005. *Financial Management and Analysis of Projects*. Manila.

7. Details of the revenue and expenditure structure of CDG, DCG, and LDG are in Tables 1–3. All three governments have experienced increasing revenues and expenditures. The revenues and expenditures of CDG and DCG are reasonably balanced, with substantial annual surpluses. LDG’s deficit is balanced with new debt. All three governments have access to capital markets with increasing rates of new debt.

Table 1: Changshou District Revenue and Expenditure
(CNY million)

Item	2012	2013	2014	2015	2016
A. Municipality Fiscal Revenues					
1. Revenues from taxes ^a	1,732	2,038	2,337	2,592	2,813
2. Revenues from non-taxes	791	677	794	911	924
3. Revenue from upper government ^b	2,265	2,312	2,339	4,088	3,480
4. Fund revenues ^c	3,896	4,453	4,746	6,283	8,131
Subtotal (revenue)	8,684	9,480	10,216	13,874	15,348
B. Proceeds of New Debt	7	59	118	1,545	810
C. Municipality Fiscal Expenditure					
1. General public service	430	480	458	367	383
2. Public safety	205	207	271	334	361
3. Education	1,006	720	754	922	1,033
4. Science and technology	19	62	78	161	73
5. Culture, sport, and media	32	34	42	49	53
6. Social insurance and employment	728	745	764	820	711
7. Medical and sanitation	399	460	616	651	754
8. Environmental protection	236	236	309	347	424
9. Urban and rural community affairs	217	219	502	713	955
10. Agriculture, forestry, and water affairs	593	571	543	575	371
11. Transportation	146	172	199	229	142
12. Industry, commercial, and financing affairs	55	54	41	47	66
13. Debt service repayment—interest and principal	2	5	3	7	60
14. Others	819	993	795	700	750
15. Transferring expenditure to upper government ^d	155	193	130	1,588	1,274
Subtotal (expenditure)	5,042	5,151	5,505	7,510	7,410
D. Surplus	3,642	4,329	4,711	6,364	7,938

^a Includes value-added tax, business tax, income tax, resource tax, house property tax, and other taxes.

^b From Chongqing Municipal Government. Major components of these revenues are stable.

^c These funds are mainly from land development, i.e., land transfer, so they are dependable.

^d The expenditures mainly include upper level government taxes collected by local government.

Source: Finance Bureau of Changshou District.

Table 2: Dianjiang County Revenue and Expenditure
(CNY million)

Item	2012	2013	2014	2015	2016
A. Municipality Fiscal Revenues					
1. Revenues from taxes ^a	510	586	668	786	1,024
2. Revenues from non-taxes	528	558	542	735	696
3. Revenue from upper government ^b	2,219	2,368	2,630	2,844	3,158
4. Fund revenues ^c	1,492	1,563	1,670	1,572	1,407
Subtotal (revenue)	4,749	5,075	5,510	5,937	6,285
B. Proceeds of New Debt	7	35	53	720	1,600

Item	2012	2013	2014	2015	2016
C. Municipality Fiscal Expenditure					
1. General public service	464	487	523	367	337
2. Public safety	108	110	106	209	211
3. Education	826	828	817	915	1,119
4. Science and technology	22	33	21	45	51
5. Culture, sport, and media	19	26	35	65	79
6. Social insurance and employment	310	367	514	614	668
7. Medical and sanitation	381	498	629	682	767
8. Environmental protection	90	117	129	118	107
9. Urban and rural community affairs	112	114	80	350	810
10. Agriculture, forestry, and water affairs	481	574	639	571	509
11. Transportation	71	76	77	109	121
12. Industry, commercial, and financing affairs	38	31	18	22	38
13. Debt service repayment—interest and principal	0	0	2	4	25
14. Others	267	145	147	313	246
15. Transferring expenditure to upper government ^d	0	0	0	0	0
Subtotal (expenditure)	3,189	3,406	3,737	4,384	5,088
D. Surplus	1,560	1,669	1,773	1,553	1,197

^a Includes value-added tax, business tax, income tax, resource tax, house property tax, and other taxes.

^b From Chongqing Municipal Government. Major components of these revenues are stable.

^c These funds are mainly from land development, i.e., land transfer, so they are dependable.

^d The expenditures mainly include upper level government taxes collected by local government.

Source: Finance Bureau of Dianjiang County.

Table 3: Liangping District Revenue and Expenditure
(CNY million)

Item	2012	2013	2014	2015	2016
A. Municipality Fiscal Revenues					
1. Revenues from taxes ^a	480	609	687	814	1,028
2. Revenues from non-taxes	627	768	850	930	948
3. Revenue from upper government ^b	2,453	2,632	2,714	2,996	3,198
4. Fund revenues ^c	1,067	976	1,057	1,099	974
Subtotal (revenue)	4,627	4,985	5,308	5,839	6,148
B. Proceeds of New Debt	7	80	87	1,700	2,386
C. Municipality Fiscal Expenditure					
1. General public service	626	724	768	777	638
2. Public safety	124	148	153	937	1,053
3. Education	810	815	832	937	1,053
4. Science and technology	24	33	38	46	7
5. Culture, sport, and media	55	28	30	54	62
6. Social insurance and employment	410	435	483	601	589
7. Medical and sanitation	415	421	604	753	751
8. Environmental protection	94	156	156	219	230
9. Urban and rural community affairs	99	124	162	427	620
10. Agriculture, forestry, and water affairs	556	603	631	815	774
11. Transportation	96	141	94	116	191
12. Industry, commercial, and financing affairs	53	38	37	20	25

Item	2012	2013	2014	2015	2016
13. Debt service repayment—interest and principal	2	2	4	7	63
14. Others	181	273	279	(127)	(377)
15. Transferring expenditure to upper government ^d	46	56	43	720	1,138
Subtotal (expenditure)	3,591	3,997	4,314	6,302	6,817
D. Surplus	1,036	988	994	(463)	(669)

() = negative.

^a Includes value-added tax, business tax, income tax, resource tax, house property tax, and other taxes.

^b From Chongqing Municipal Government. Major components of these revenues are stable.

^c These funds are mainly from land development, i.e., land transfer, so they are dependable.

^d The expenditures mainly include upper level government taxes collected by local government.

Source: Finance Bureau of Liangping District.

8. The results of the fiscal sustainability analysis are in Table 4. Two benchmarks for assessment of capacity were used: (i) CDG, LDG, and DCG have fiscal surplus to absorb project incremental costs; and (ii) project-related fiscal burden is acceptable, provided it does not exceed 2% of revenues. Revenues and expenditures have been project for 2019–2028 using a cost escalation rate of 2.5%.² The project cost burdens relative to current revenues during implementation do not exceed 2% for CDG, LDG, and DCG. The projected fiscal surplus of CDG and DCG is sufficient to cover the total project financial obligations resulting from the O&M cost, counterpart funds, and debt service payment. Although LDG shows a deficit, it has access to capital markets and would be able to cover total project financial obligations. LDG will cover any eventual annual deficit with additional transfers from higher level government and will prioritize budget to cover O&M costs. Fiscal sustainability is concluded.

Table 4: Forecast Project Cost Burdens
(CNY million)

Item	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
A. Total Counterpart Funding										
Changshou	223	164	101	105	93	0	0	0	0	0
Dianjiang	142	94	54	57	52	0	0	0	0	0
Liangping	144	95	55	58	53	0	0	0	0	0
Subtotal	509	353	210	220	198	0	0	0	0	0
B. Total Debt Service Costs										
Changshou	2	5	8	11	13	35	35	34	33	33
Dianjiang	1	3	5	6	8	21	20	20	20	19
Liangping	1	3	5	7	8	21	21	20	20	20
Subtotal	4	11	18	24	29	77	76	74	73	72
C. Total Recurrent O&M costs										
Changshou	0	0	0	0	0	13	14	14	14	15
Dianjiang	0	0	0	0	0	11	12	12	12	12
Liangping	0	0	0	0	0	12	12	12	12	13
Subtotal	0	0	0	0	0	36	38	38	39	40
D. Total Cost Burden										
Changshou	225	169	109	116	106	27	27	27	26	26
Dianjiang	143	97	59	63	60	20	19	19	19	19
Liangping	145	98	60	64	61	20	20	20	20	20
Subtotal	513	364	228	243	227	67	66	66	65	65

² ADB. 2017. *Domestic Cost Escalation Factors, 2017–2021*. Manila.

Item	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
E. Total Cost Burden ÷ Revenue (%)										
Changshou	1.4%	1.0%	0.6%	0.7%	0.6%	0.3%	0.3%	0.2%	0.2%	0.2%
Dianjiang	2.1%	1.4%	0.8%	0.9%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%
Liangping	2.2%	1.4%	0.9%	0.9%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%
F. Annual Surplus before Project										
Changshou	8,548	8,762	8,981	9,206	9,436	9,672	9,913	10,161	10,415	10,676
Dianjiang	1,289	1,321	1,354	1,388	1,423	1,458	1,495	1,532	1,571	1,610
Liangping	(720)	(738)	(757)	(776)	(795)	(815)	(835)	(856)	(878)	(900)
Subtotal	9,117	9,345	9,578	9,818	10,064	10,315	10,573	10,837	11,108	11,386

() = negative, O&M = operation and maintenance.

Source: Asian Development Bank estimates.