



# Report and Recommendation of the President to the Board of Directors

---

Project Number: 46063-002  
June 2015

## Proposed Loan People's Republic of China: Xinjiang Tacheng Border Cities and Counties Development Project

Distribution of this document is restricted until it has been approved by the Board of Directors. Following such approval, ADB will disclose the document to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 15 May 2015)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1612
\$1.00	=	CNY6.201

## ABBREVIATIONS

3R	–	reduce, reuse, recycle
ADB	–	Asian Development Bank
EIRR	–	economic internal rate of return
EMDP	–	ethnic minority development plan
EMP	–	environmental management plan
GAP	–	gender action plan
km	–	kilometer
LIBOR	–	London interbank offered rate
MSW	–	municipal solid waste
O&M	–	operation and maintenance
PAM	–	project administration manual
PIU	–	project implementation unit
PMO	–	project management office
PRC	–	People's Republic of China
RCI	–	regional cooperation and integration
TPG	–	Tacheng Prefecture Government
XUAR	–	Xinjiang Uygur Autonomous Region

## NOTE

In this report, "\$" refers to US dollars.

<b>Vice-President</b>	S. Groff, Operations 2
<b>Director General</b>	A. Konishi, East Asia Department (EARD)
<b>Director</b>	S. Penjor, Urban and Social Sectors Division, EARD
<b>Team leader</b>	A. Ressano-Garcia, Senior Urban Development Specialist, EARD
<b>Team members</b>	F. Connell, Principal Counsel, Office of the General Counsel M. Gupta, Principal Safeguards Specialist (Resettlement), EARD A. Morel, Environment Specialist, EARD G. Tadevosyan, Safeguards Specialist, EARD J. Vanta, Senior Operations Assistant, EARD W. Walker, Principal Social Development Specialist, EARD L. Wang, Senior Project Officer (Urban Development), People's Republic of China Resident Mission, EARD L. Zou, Principal Financial Management Specialist, EARD
<b>Peer reviewer</b>	J. Huang, Principal Urban Development Specialist, South Asia Department

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## CONTENTS

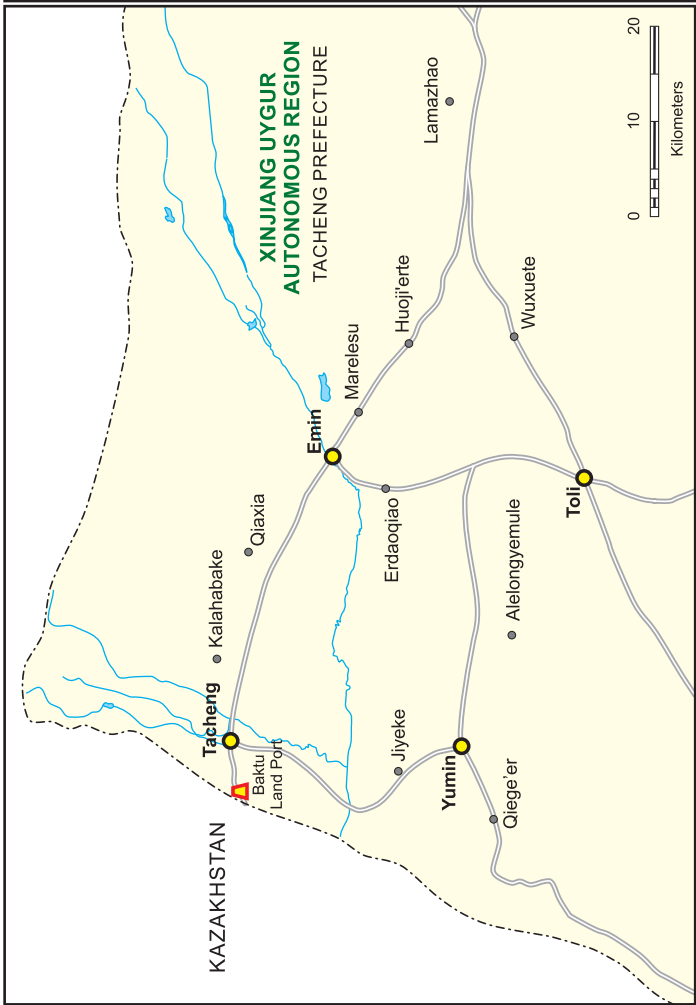
	<b>Page</b>
PROJECT AT A GLANCE	
MAP	
I. THE PROPOSAL	1
II. THE PROJECT	1
A. Rationale	1
B. Impact and Outcome	4
C. Outputs	4
D. Investment and Financing Plans	5
E. Implementation Arrangements	6
III. DUE DILIGENCE	7
A. Technical	7
B. Economic and Financial	7
C. Governance	7
D. Poverty and Social	8
E. Safeguards	8
F. Risks and Mitigating Measures	9
IV. ASSURANCES AND CONDITIONS	10
V. RECOMMENDATION	10
APPENDIXES	
1. Design and Monitoring Framework	11
2. List of Linked Documents	14

## PROJECT AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 46063-002</b>	
<b>Project Name</b>	Xinjiang Tacheng Border Cities and Counties Development Project	<b>Department /Division</b>	EARD/EASS
<b>Country Borrower</b>	China, People's Republic of Ministry of Finance	<b>Executing Agency</b>	Xinjiang Uygur Autonomous Region Government
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>	
✓ <b>Water and other urban infrastructure and services</b>	Other urban services		25.00
	Urban flood protection		25.00
	Urban solid waste management		10.00
<b>Transport</b>	Urban roads and traffic management		90.00
<b>Total</b>			<b>150.00</b>
<b>3. Strategic Agenda</b>		<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Eco-efficiency		
Regional integration (RCI)	Urban environmental improvement		
	Pillar 1: Cross-border infrastructure		
<b>4. Drivers of Change</b>		<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD)	Institutional development	Effective gender mainstreaming (EGM)	✓
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Rural	Medium
		Urban	Medium
<b>6. Risk Categorization:</b>	Complex		
<b>7. Safeguard Categorization</b>	Environment: B Involuntary Resettlement: A Indigenous Peoples: B		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>150.00</b>	
Sovereign Project loan: Ordinary capital resources		150.00	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>152.87</b>	
Government		152.87	
<b>Total</b>		<b>302.87</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems		No	
Use of country public financial management systems		Yes	

# XINJIANG TACHENG BORDER CITIES AND COUNTIES DEVELOPMENT PROJECT

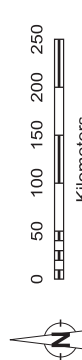
IN THE PEOPLE'S REPUBLIC OF CHINA



93° 00'E

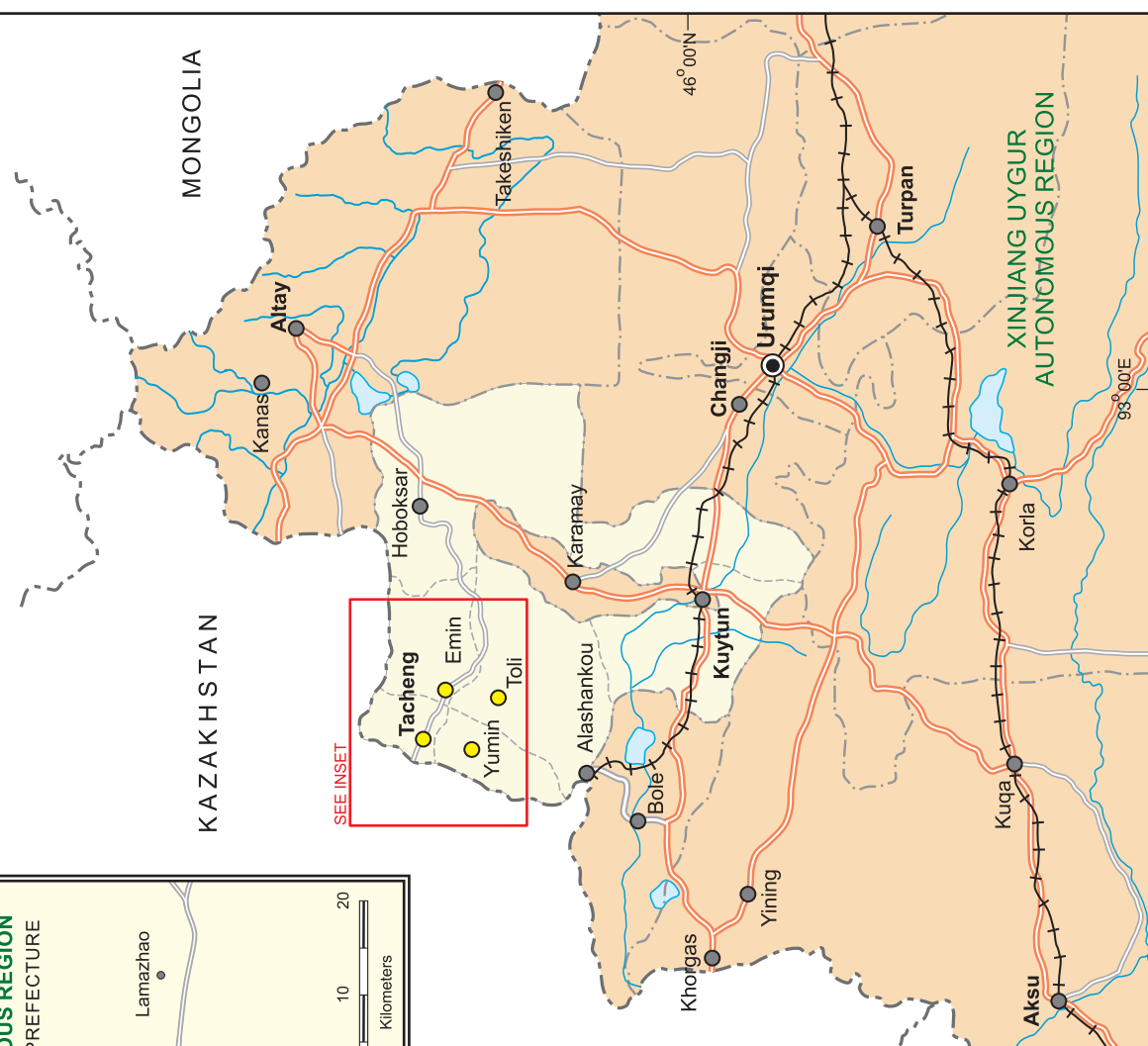
46° 00'N

78° 00'E



- Project Location
- Baku Land Port
- Tacheng Prefecture
- Provincial Capital
- City/Town
- National Road
- Other Road
- Railway
- River
- County Boundary
- Prefecture Boundary
- Provincial Boundary
- International Boundary

This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.



93° 00'E

46° 00'N

93° 00'E

KAZAKHSTAN

MONGOLIA

KYRGYZ REPUBLIC

XINJIANG UYGUR AUTONOMOUS REGION

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the People's Republic of China (PRC) for the Xinjiang Tacheng Border Cities and Counties Development Project.<sup>1</sup>

2. By meeting urgent needs in urban infrastructure and municipal services, the project will improve the environment, social inclusiveness, and border trade capacity of Tacheng City and the county cities of Emin, Tuoli, and Yumin.

## II. THE PROJECT

### A. Rationale

3. Located in the northwest of the PRC, Xinjiang Uygur Autonomous Region (XUAR) is a border area linking the PRC to Central Asia. It covers almost one-sixth of the country's total area. In 2013, its population was about 22.65 million,<sup>2</sup> 60.5% of which comprises 36 ethnic minority groups.<sup>3</sup> XUAR has lagged behind in economic development and remains one of the poorest and least-developed regions in the PRC. In 2013, XUAR's per capita disposable income of urban households was CNY19,874, which was the second lowest among all the PRC provinces and autonomous regions.<sup>4</sup> Such wide disparities prompted the Government of the PRC to launch the National Strategy for Development of the Western Region in 2000, with the aim to promote balanced economic growth and to raise the living standards in the region.<sup>5</sup>

4. Tacheng Prefecture is in the northwest of XUAR and shares a 480 kilometer (km)-long border with Kazakhstan. Due to its strategic geographical location along the economic corridors of the New Silk Road Economic Belt, border trade is playing an increasing role in local economic development, which is based mainly on the rich agricultural and mineral resources of the prefecture.<sup>6</sup> To promote border trade development, the central government is cooperating with the regional and local authorities to build rail and road networks, upgrade key urban infrastructure and land port facilities, and support the development of small and medium-sized enterprises and the introduction of trade facilitation initiatives.<sup>7</sup> These investments will provide a big opportunity for Tacheng City and neighboring counties such as Emin, Tuoli, and Yumin to become strategic economic hubs and derive the benefits from the growing regional border trade.

5. However, Tacheng Prefecture is still lagging the central areas of XUAR significantly in terms of income levels and living conditions. The disposable income at CNY16,464 (2013) is considerably below the national average of CNY24,565. A lack of investment and planning, exacerbated by a harsh natural environment and high demographic pressure, has led to outdated and precarious urban infrastructure and municipal services in the cities of Tacheng,

---

<sup>1</sup> The design and monitoring framework is in Appendix 1.

<sup>2</sup> About 1.65% of the population of the PRC.

<sup>3</sup> The major groups are Hui, Kazakh, Kyrgyz, Mongolian, and Uygur.

<sup>4</sup> Disposable income is total personal income minus personal current taxes. In the PRC, disposable income is calculated separately for urban and rural citizens.

<sup>5</sup> State Council of the PRC. 2000. *The National Strategy for Development of the Western Region*. Beijing. The strategy focuses on developing infrastructure, protecting the environment, and strengthening economic cooperation and trade with neighboring provinces and countries.

<sup>6</sup> The New Silk Road Economic Belt is a key element of the One Belt and One Road national strategy and aims to promote greater connectivity between the PRC and the central and western parts of Eurasia. Regional Cooperation and Integration (accessible from the linked documents in Appendix 2).

<sup>7</sup> A recent example of this is the selection of Baktu Land Port as a green corridor for agricultural products between the PRC and Kazakhstan. This pilot scheme aims to achieve faster and more efficient customs clearance and inspection of agricultural trade, and it is later to be replicated to other carefully selected land ports along the border.

Emin, Tuoli, and Yumin.<sup>8</sup> This situation is constraining not only socioeconomic development but also wider regional economic integration across the prefecture and border trade.

6. The urban road network in the project cities is inadequate for the planned population growth and the resulting increase in commercial activities. The lack of roads increasingly makes the urban areas difficult to access, causing serious economic and safety concerns for drivers, nonmotorized transport users, and pedestrians. Related to the poor quality of roads, access to basic utilities is also low—on average, 16% of households in the project cities are not connected to clean piped water, and 19% are not connected to the sewerage system. The current coverage rate of district heating in Tacheng City is only 65%, and a significant share of the population still relies on small coal-fired boilers and family heating stoves, resulting in substantial energy inefficiency and air pollution. Municipal solid waste (MSW) management capacity is limited, sorting facilities are lacking, and collection systems are extremely basic, which also causes considerable environmental pollution. Tacheng City is crossed by the Kalanggauer River, which carries snowmelt and storm flows from the mountains in the north. Throughout the city limits, the river remains unrestrained and some areas experience seasonal flooding that causes significant economic losses to its inhabitants. A considerable share of these urban populations resides in neighborhoods connected by unpaved alleys. These areas lack access to basic urban services and safety features such as street lighting, making living conditions difficult, especially in the harsh winters. In addition, all project cities and counties are also home to large numbers of ethnic minorities, whose members experience considerable difficulties in adapting to the changing urban, economic, and social conditions.

7. In 2012, Tacheng City and the counties of Emin, Tuoli, and Yumin approved their respective master plans (2012–2030), which target the cities to become livable and environmentally sustainable, prioritizing the development of municipal infrastructure and services that would raise the living standards of its residents and support their effective integration into the regional economy. The proposed project takes a multisector and integrated approach to urban development, meeting the urgent and prioritized needs identified in the master plans—river rehabilitation; expansion of public and green spaces; improvements to the urban road network and traffic management, water supply and sewerage services, district heating service, solid waste collection system; and upgrading of equipment and services at the border land port.<sup>9</sup> The proposed project will contribute indirectly to poverty reduction by enhancing the access of urban and peri-urban residents to upgraded municipal services and an improved urban environment. The project will also help promote regional cooperation and integration (RCI). This will be achieved by enhancing the level of preparedness of the target cities and counties to participate and benefit from the growing regional border trade and for their effective integration as key hubs on the economic corridors of the New Silk Road Economic Belt.<sup>10</sup>

8. **Strategic fit.** The project supports a key goal of Strategy 2020 of the Asian Development Bank (ADB)—making cities livable and sustainable through the creation of a cleaner and healthier environment.<sup>11</sup> It also contributes to greater physical connectivity as set

<sup>8</sup> Given greater rural–urban migration, the urban population in Tacheng Prefecture has grown to 75% (2012) of the total population. Population growth prospects are considerable: Tacheng: 2014 (170,000), 2030 (320,000); Emin: 2014 (95,000), 2030 (150,000); Tuoli: 2014 (42,000), 2030 (90,000); and Yumin: 2014 (50,000), 2030 (90,000).

<sup>9</sup> In a demand–supply analysis undertaken during project preparatory technical assistance, it was concluded that the existing and planned water and wastewater treatment plants have adequate capacity to accommodate the increased demands arising from the proposed project components.

<sup>10</sup> Given their geographical proximity to corridors 1 and 2 of the Central Asia Regional Economic Cooperation Program, the project cities stand to benefit also from increasing investments and trade along these corridors.

<sup>11</sup> The project also supports ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

under ADB's RCI strategy. The project is aligned with ADB's strategic pillars of the country partnership strategy, i.e., to support inclusive and environmentally sustainable growth by promoting growth-oriented and resource-efficient urbanization.<sup>12</sup> It also supports the main thrust of ADB's Urban Operational Plan by promoting green, competitive, and inclusive cities. Similarly, the project will be in line with the Government of the PRC's upcoming Thirteenth Five-Year Plan because it supports balanced urbanization in developing cities that are livable, resource conserving, and inclusive.<sup>13</sup> By supporting greater connectivity with Kazakhstan, the project is fully in line with the PRC's New Silk Road Economic Belt initiative, the creation of economic corridors, and enhancement of RCI. It also supports XUAR's Thirteenth Five-Year Plan (2016–2020), which gives increasing priority to the development of border areas of the region that are crucial in boosting regional trade. In addition, the project is aligned with the PRC's National Plan on New Urbanization (2014–2020) by accelerating the development of small and medium-sized cities and by promoting harmonious and coordinated development between cities and surrounding small towns.<sup>14</sup>

**9. Continuity of development initiatives and incorporation of lessons.** The project design incorporates lessons from previous ADB-financed urban development projects in the PRC, particularly the four ongoing Xinjiang projects.<sup>15</sup> For road construction, it avails of valuable experience from the Xinjiang Urban Transport and Environmental Improvement Project.<sup>16</sup> Practical lessons from the Xinjiang Altay Urban Infrastructure and Environment Improvement Project will apply to the establishment and maintenance of solid waste management systems.<sup>17</sup> Following reduce, reuse, recycle (3R) principles, the project will play a demonstration role for similar cities with basic systems of collection and sorting of MSW.

**10. Special features.** The project includes many special features that are based on good practices implemented under ADB projects in more developed provinces of the PRC. Many of these features have potential for replication in other areas of XUAR or even other less developed regions of the PRC with similar conditions. In addition, these special features reinforce the integrated nature of the project and along with capacity building, aim to strengthen the sustainability of the project. One such feature is integrated flood risk management—the project will produce structural measures (riverbank stabilization with enhancement of green spaces, roadside stormwater retention, and infiltration) and nonstructural measures (flood forecasting and early flood warning, emergency response, and raising public awareness of flood risk) that will allow Tacheng City to develop an integrated management approach to urban flood risks. Adoption of best practices for MSW management is another feature—the project will pilot MSW management based on 3R principles in selected communities by introducing integrated sorted-at-source collection systems, community participation, and optimization of organic and nonorganic waste disposal. Finally, border trade capacity will be stepped up as this is a critical supplementary feature—in addition to resourcing Baktu Land Port with goods and equipment,

<sup>12</sup> ADB. 2012. *Country Partnership Strategy: People's Republic of China, 2011–2015*. Manila.

<sup>13</sup> ADB. 2013. *Urban Operational Plan, 2012–2020*. Manila.

<sup>14</sup> The National Plan on New Urbanization (2014–2020) selected Tacheng City as a key border city for development.

<sup>15</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Xinjiang Municipal Infrastructure and Environmental Improvement Project*. Manila; ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Xinjiang Urban Transport and Environmental Improvement Project*. Manila; and ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Xinjiang Altay Urban Infrastructure and Environment Improvement Project*. Manila.

<sup>16</sup> ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for Xinjiang Urban Transport and Environmental Improvement Project*. Manila.

<sup>17</sup> ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for Xinjiang Altay Urban Infrastructure and Environment Improvement Project*. Manila.



the project will also build capacity for border trade development in all project cities and counties by introducing advanced and innovative policymaking, and training on trade facilitation and logistics.

## **B. Impact and Outcome**

11. The impact will be improved urban environment, living conditions, and border trade capacity in the project border cities and counties. The outcome will be enhanced delivery and efficiency of municipal services in the project border cities and counties.

## **C. Outputs**

12. The project will take a multisector and integrated approach to urban development where outdated infrastructure and municipal services are the critical constraints to economic development, improved environment, and living conditions. The project has five outputs.

13. **Improved urban infrastructure and municipal services in Tacheng City.** This will improve the urban infrastructure and municipal services in existing and new urban areas, including (i) rehabilitation of 15.2 kilometer (km) of Kalanguer River and expansion of public and green spaces by 37 hectares, (ii) construction of 29.5 km of urban roads (for a people-centered urban transport system with emphasis on developing pedestrian and/or bicycle and public transport), (iii) construction of 47.7 km of water supply piping network and 48.8 km of sanitary sewer piping network, (iv) construction of 40.6 km of primary hot water heating pipe network and 21 hot water heat exchange stations, (v) rehabilitation of 14.1 km of urban alleys, (vi) introduction of integrated MSW management for sorting and collection in selected communities, (vii) upgrade of city operation and maintenance (O&M) equipment, and (viii) upgrade of equipment for Baktu Land Port.

14. **Improved urban infrastructure and municipal services in Emin County.** This will improve the urban infrastructure and municipal services in existing and new urban areas, including (i) rehabilitation of a 3.2 km urban road and construction of five urban roads with a combined length of 10.1 km, (ii) installation of a 7.7 km water supply piping network, (iii) installation of a 10 km sanitary sewer piping network, and (iv) upgraded maintenance equipment.

15. **Improved urban infrastructure and municipal services in Tuoli County.** This will improve the urban infrastructure around the existing urban areas by building an outer ring road of 14.1 km, and by upgrading city maintenance equipment.<sup>18</sup>

16. **Improved urban infrastructure and municipal services in Yumin County.** This will improve the urban infrastructure and municipal services in existing and new urban areas, including (i) rehabilitation of three urban roads with a total length of 4.9 km and construction of three new urban roads with a total length of 9.7 km for people-centered urban transport system with emphasis on developing pedestrian, bicycle, and public transport; and (ii) upgraded maintenance and MSW equipment.

17. **Improved and inclusive capacity development and project management.** This output will strengthen capacity and institutions for the project's management and operation. It will provide expert support and advice on ADB policies and procedures for project implementation such as contract management, financial management, safeguard and social

---

<sup>18</sup> Includes street-cleaning vehicles, landscaping equipment, and MSW collection and transport trucks.

monitoring, and capacity-development activities. The output will also include three specific features to strengthen the capacity of the executing and implementing agencies for (i) MSW management; (ii) border trade and logistics development; and (iii) people-centered urban transport planning, traffic management, and safety.

#### D. Investment and Financing Plans

18. The project is estimated to cost \$302.87 million (Table 1). The government has requested a loan of \$150 million from ADB's ordinary capital resources to help finance the project. The loan will have a 26-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year, and such other terms and conditions as set forth in the draft loan and project agreements.

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

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Tacheng subproject	193.05
2. Emin subproject	32.34
3. Tuoli subproject	21.71
4. Yumin subproject	15.10
5. Capacity development and institutional strengthening	1.70
<b>Subtotal (A)</b>	<b>263.90</b>
<b>B. Contingencies<sup>c</sup></b>	<b>31.45</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>	<b>7.52</b>
<b>Total (A+B+C)</b>	<b>302.87</b>

<sup>a</sup> Includes taxes and duties of about \$6.23 million to be financed from the government and Asian Development Bank (ADB) loan resources. The principles followed in determining the amount of taxes and duties to be financed by ADB are that (i) the amount is within reasonable country thresholds, (ii) the amount represents 2.4% of base cost and not an excessive share of the project investment plan, (iii) taxes and duties apply only to ADB-financed expenditures, and (iv) the financing of taxes and duties is relevant to the success of the project.

<sup>b</sup> In mid-2014 prices. Of the base cost, 65% will finance civil works, 4% goods, and 0.7% consulting services.

<sup>c</sup> Physical contingencies computed at 6% for civil works; and 6% for field research and development, training, surveys, and studies. Price contingencies computed at 4.16% on foreign exchange costs and 9.37% on local currency costs.

<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 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

19. The loan will finance 49.53% of the project cost, including works, goods, and consulting services and training. The loan will also finance taxes and duties for eligible ADB-financed expenditures, and transport and insurance costs. The government has provided ADB with the reasons for its decision to borrow under ADB's LIBOR-based lending facility on the basis of these terms and conditions. The local governments and/or implementing agencies will provide counterpart funding equivalent to \$152.87 million, which will finance 50.47% of the project cost. The financing plan is in Table 2.

20. The PRC is the borrower of the loan and will make it available through the Government of XUAR and the Tacheng Prefecture Government (TPG) to the local governments—i.e., of Tacheng City, and Emin, Tuoli, and Yumin counties—on the same terms and conditions as those of the ADB loan. As the end-borrowers, the local governments will assume foreign exchange and interest rate variation risks for the ADB loan. The PRC, XUAR, Tacheng Prefecture, and local governments have assured ADB that counterpart funding will be provided in a timely manner, including any additional counterpart funding required for any shortfall of

funds or cost overruns. The fund-flow mechanism is shown in the project administration manual (PAM).<sup>19</sup>

**Table 2: Financing Plan**

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	150.00	49.53
Tacheng Municipal Government	112.73	37.22
Emin County Government	21.61	7.13
Tuoli County Government	10.65	3.52
Yumin County Government	7.88	2.60
<b>Total</b>	<b>302.87</b>	<b>100.00</b>

Source: Asian Development Bank.

## E. Implementation Arrangements

21. The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

**Table 3: Implementation Arrangements**

Aspects	Arrangements		
Implementation period	June 2015–December 2020		
Estimated completion date	31 December 2020 (estimated loan closing date: 30 June 2021)		
Management			
(i) Oversight body	Tacheng Prefecture Project Leading Group; Tacheng Prefecture deputy commissioner (chair); senior officials from Tacheng Prefecture Development Reform Commission, Finance Bureau, HCB, and other related agencies (members)		
(ii) Executing agency	Xinjiang Uygur Autonomous Region Government		
(iii) Key implementing agencies	Tacheng Prefecture Government, Tacheng City Government, Emin, Tuoli, and Yumin county governments		
(iv) Implementation units	PIU1 – Tacheng City HCB, PIU2 – Tacheng City Water Resources Bureau, PIU3 – Liaota New District, PIU4 – Emin HCB, PIU5 – Tuoli HCB, and PIU6 – Yumin HCB		
Procurement <sup>a</sup>	International competitive bidding	2 contracts	\$7.41 million
	National competitive bidding	29 contracts	\$177.87 million
Consulting services	Quality- and cost-based selection	113 person-months	\$1.623 million
	Individual consultant selection (start-up support)	8 person-months	\$0.077 million
Retroactive financing and/or advance contracting <sup>b</sup>	National competitive bidding	4 contracts	\$34.70 million
	Consulting services	2 contracts	\$1.70 million
Disbursement	Loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank, HCB = housing and construction bureau, PIU = project implementation unit.

<sup>a</sup> All goods and works will be procured in accordance with ADB's Procurement Guidelines (2015, as amended from time to time), and all consulting services will be engaged in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

<sup>b</sup> Approval of advance contracting does not commit ADB to finance the project. The amount to be retroactively financed does not exceed 20% of the loan and is incurred before loan effectiveness but not earlier than 12 months before the date of signing of the related legal agreement.

Source: Asian Development Bank.

22. To expedite project implementation, the government requested ADB to approve advance contracting, which includes the recruitment of consultants and procurement of civil works; and retroactive financing for eligible expenditures for consulting services and civil works procurement. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time), and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

<sup>19</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

### III. DUE DILIGENCE

#### A. Technical

23. All project outputs are designed taking into account local circumstances, topography, and climate in accordance with relevant PRC design guidelines and local regulations. The transport component incorporates holistic road design and safety design considerations. The Kalangguer River flood-control works, including riverbank revitalization, will greatly improve the resilience of the city to floods and at the same time embellish the urban environment. River embankment heights are based on the design flood height and include a 0.6-meter safety margin to account for uncertainties in design assumptions and potential increases in storm intensity as a result of climate change.<sup>20</sup> Where possible, the component designs incorporate 3R approaches to MSW management and energy-efficient district heating supply. The detailed engineering design will comply with up-to-date urban design standards and specifications and adopt international best practices. A capacity-building program for related urban services is included in the project to ensure sustainable O&M of project facilities. A detailed description is in the PAM.

#### B. Economic and Financial

24. **Economic.** The economic evaluation of the project was carried out in accordance with ADB's Guidelines for Economic Analysis of Projects.<sup>21</sup> The base-case economic internal rates of return (EIRRs) for individual subprojects as well as the project as a whole have been calculated. At a 12% discount rate, the whole project is found to be economically viable. The net present value for the whole project is CNY362.0 million and the base-case EIRR for the whole project is 15.3%, which exceeds the economic opportunity cost of capital. The EIRR for the Tacheng City subproject is 15.5%; Emin, 13.8%; Tuoli, 16.2%; and Yumin, 14.6%. The sensitivity analysis shows that the project's economic return is robust against negative impacts from benefit reduction, cost overrun, and project implementation delay.

25. **Financial.** The subprojects with a focus on cost recovery were analyzed based on key financial ratios describing risk and profitability. The analysis evaluated their viability by comparing their financial internal rates of return with the weighted average cost of capital. The returns were computed at 4.5%–8.4%, all exceeding the respective weighted average cost of capital of 2.9%, which makes the proposed investments viable. Counterpart funding requirements, debt service costs, and recurrent project O&M costs were compared with forecast revenues and expenditures. The proposed fund-flow arrangement for the project is consistent with ongoing ADB projects in XUAR and uses proven domestic disbursement procedures.

#### C. Governance

26. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the management and staff of executing and implementing agencies. The specific policy requirements and supplementary measures are described in the PAM, including providing support and training on ADB policies and procedures, engaging a tendering agent and project implementation consultant to strengthen procurement. The financial management assessment concludes that, although the PMO and the implementing agencies have sufficient financial management capacity, they lack sufficient experience in managing ADB projects and require a component to build their capacity to implement the project in line with ADB policies and procedures. The procurement capacity assessment concludes that Tacheng Prefecture PMO,

---

<sup>20</sup> The climate risk to the project was assessed through desk review, and is considered medium. Annual mean temperature and annual precipitation are projected to increase significantly in the project area.

<sup>21</sup> ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

implementing agencies, and project implementation units (PIUs) lack experience in ADB- or foreign-funded project. Strong support from implementation consultants and a well-designed training program shall be provided to ensure effective and efficient project implementation.

#### **D. Poverty and Social**

27. The direct beneficiaries of the project are mostly urban residents in the project areas of Tacheng City and Emin, Tuoli, and Yumin counties of Tacheng Prefecture, accounting for 256,751 people, including about 34,533 poor (13.4% of total beneficiaries); 127,268 women and girls (49.6%); and 120,183 ethnic minority people (46.8%). The project will provide residents with better roads and transport services, access to safe and reliable water supply and heating services, and an improved living environment. Public awareness programs and implementation of transport safety and sanitation management will ensure the positive and long-term social benefits of the project. Construction activities will directly create 1,286 temporary jobs during project implementation; O&M of project outputs will directly create an estimated 237 permanent jobs. Many temporary jobs will be available for unskilled labor, and contractors are encouraged to employ local workers whenever possible. The Tacheng Prefecture PMO has set employment targets for women (30%), the poor (15%), and ethnic minorities (30%). The project city and/or county community offices and the Labor Bureau will assist contractors in realizing these targets. The PIUs will ensure that all PRC labor laws and labor standards are complied with. This will be closely monitored under the project performance monitoring system. Details on specific measures to ensure the poverty and social benefits are in the gender action plan (GAP), social development action plan in the PAM, and ethnic minority development plan (EMDP).

28. **Gender benefits.** The project is categorized as effective gender mainstreaming. More effective infrastructure will reduce time burdens, increase mobility and access, and boost public health. The poverty and social analysis revealed that women strongly support the project across all city and/or county, as it will improve their quality of life, mobility, access, and health, and create jobs and income opportunities. Gender has been mainstreamed into the project design (features such as road lighting, nonmotorized transport, and pedestrian access are included). The GAP includes specific targets for women in terms of employment and participation, which have been assured by the government. The GAP will ensure (i) women's consultation and participation in traffic safety and sanitation management awareness, transport services, and other project activities (50%); (ii) jobs and income opportunities during and after project implementation (30%); (iii) gender sensitivity training; and (iv) appropriate gender targets, indicators, and sex-disaggregated data. The TPG will be responsible for implementing the GAP and reporting semiannually on progress and achievements of gender benefits under the project.

#### **E. Safeguards**

29. **Environment.** The project environment categorization is B. An initial environmental examination and an environmental management plan (EMP) were prepared in accordance with the requirements set out in ADB's Safeguard Policy Statement (2009), and disclosed on ADB's website on February 2015. Anticipated environmental impacts and risks are mostly modest and localized, and can be mitigated to an acceptable level through EMP implementation. Project construction will require significant earthwork, which will temporarily increase soil erosion.<sup>22</sup> Other negative impacts during construction include noise, dust, temporary traffic disturbance, and localized deterioration of the Kalanguer River water quality caused by riverbank works. During operation, road improvements will minimize dust and inefficient driving practices but overall, traffic noise and greenhouse gas emissions will increase as traffic increases. The TPG

<sup>22</sup> The project will require 2.71 million cubic meters of borrow and generate 0.97 million cubic meters of spoil, and could induce 24,300 tons of soil erosion without soil protection measures.

will delegate the overall EMP coordination to the Tacheng Prefecture PMO and implementation responsibility to the PIUs. Capacity building will be provided to the Tacheng Prefecture PMO and PIUs in coordinating EMP implementation, and to relevant local authorities to properly maintain project facilities, including periodic review of maintenance plans to account for potential increases in maintenance requirements resulting from climate change.

30. **Involuntary resettlement.** The project is classified as category A for involuntary resettlements. The project will acquire about 1,474 *mu* of collective land and 1,481 *mu* of state-owned land.<sup>23</sup> A total of 91,001 square meters including residential houses and 11,761 square meters of shops and enterprises will be demolished. The permanent land acquisition and house demolition will affect 684 households with 2,389 persons, of which 831 persons belong to ethnic minority groups. Nearly 237 households with 1,148 persons will suffer house demolition impacts and will be physically displaced. Four resettlement plans consistent with ADB's Safeguard Policy Statement have been developed for each project city and/or county. Compensation for lost assets and allowances will be at replacement costs and paid to affected persons prior to displacement. The resettlement information booklets have been disclosed to the community, village offices, and affected persons in both the Chinese and Kazakh languages in February 2015. Resettlement plans have also been posted on the ADB website. Each city and/or county PMO and PIU will have at least two full-time resettlement staff, and each PIU will carry out internal supervision and monitoring to ensure compliance with the resettlement plan. During project implementation, training on ADB's involuntary resettlement policy and procedures will be provided to the PMO and/or PIU and resettlement management staff to make sure that land acquisition and resettlement activities is implemented properly. A grievance mechanism will be set up and an independent agency will be engaged for the semiannual external monitoring and evaluation.

31. **Indigenous peoples.** The project is classified as category B for the indigenous peoples. Ethnic minorities in Tacheng Prefecture represent about 46.8% of the total population. The top seven minorities in the project area and Tacheng Prefecture, based on the latest census, are Daur, Hui, Kazakh, Mongolian, Russian, Uygur, and Xibe. The majority of ethnic people in these counties are Kazakh, who, in 2012, represented over 76% of the ethnic minority population in the project city and/or counties. The poverty and social analysis found that the urban communities are ethnically mixed and some aspects, such as cultural and language differences, are maintained. Not all ethnic minority people speak Mandarin, especially those middle-aged or older. Accordingly, an EMDP has been developed to facilitate the inclusion of ethnic minority people in all project activities and to protect them from any disadvantages that language barriers may create with respect to employment by project contractors. The EMDP, endorsed by the government, was disclosed in February 2015 in both the Mandarin and Kazakh languages to ethnic minority people targeted by the project. The EMDP was also uploaded on the ADB website. Detailed monitoring and reporting arrangements are included in the PAM.

## F. Risks and Mitigating Measures

32. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>24</sup> The project has no unusual technical risks. The project's integrated benefits and impacts are expected to outweigh costs and risks.

<sup>23</sup> A *mu* is a Chinese unit of measurement (1 *mu* = 666.67 square meters).

<sup>24</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

**Table 4: Summary of Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigating Measures</b>
Weak capacity of implementing agencies to effectively withdraw Asian Development Bank (ADB) loan proceeds, delaying disbursement	Provide training workshops to build capacity for project management office and implementing agency staff and relevant government agencies  (Before and during project implementation)
Lack of procurement capacity for ADB- or other foreign-funded projects, resulting in poor preparation of the procurement plan and bidding documents, and in significant delay of the process	(i) Engage start-up consultant for bidding document preparation, e.g., technical specifications before the mobilization of loan implementation consultants. (ii) Provide implementation consulting support for technical specifications in the bidding documents and assist in tender documentation preparation. (iii) Engage tendering agent with significant ADB experience in a timely manner to assist with contract, bid documentation, bidding and evaluation procedures, and appointment of contractors.
Combined heat and power construction is delayed and cannot supply hot water to the newly developed district heating network	ADB will closely monitor combined heat and power preparations. Existing heat-only boilers with total capacity of 650 megawatts are able to meet expected heat demand until 2018.
Delay in land acquisition and resettlement approvals and implementation	(i) Assurance from Tacheng Municipal Government, Emin Municipal Government, Tuoli Municipal Government, and Yumin Municipal Government on the availability of counterpart funding with detailed financing plan. (ii) Update of resettlement plans based on the final design and survey. (iii) Institutional strengthening and training for carrying out land acquisition and resettlement tasks.
Unsustainable operation and maintenance of infrastructure subprojects for lack of capacity or budget, and delay in tariff increase	(i) Support for management improvement such as road maintenance and traffic management. (ii) Capacity building and institutional strengthening support for prudent operational practices and training. (iii) Assurances on staff resources, operation and maintenance budget provisions, and water tariff increase (in Tacheng and Emin) for cost recovery.

Source: Asian Development Bank.

#### **IV. ASSURANCES AND CONDITIONS**

33. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents. In addition to ADB's standard assurances, the government has agreed to an initial set of specific assurances to be incorporated in the loan and project agreements.

#### **V. RECOMMENDATION**

34. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$150,000,000 to the People's Republic of China for the Xinjiang Tacheng Border Cities and Counties Development Project, from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 26 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Takehiko Nakao  
President

5 June 2015

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> Improved urban environment, living conditions, and border trade capacity in the project border cities and counties</p>	<p><b>By 2024</b> Average annual growth rates of gross domestic product per capita are maintained at 8% (from CNY36,550) (2012 data) and urban residents' average annual per capita disposable income is increased by 6% from CNY17,921 in Tacheng Prefecture (2012 data)</p> <p>Tacheng Prefecture border trade increases on average by 8% annually from CNY448 million (2012)</p> <p>Urban resident satisfaction rate with urban infrastructure and municipal services increased to 85% from 70% (2013)</p>	<p>Tacheng, Emin, Tuoli, Yumin, and XUAR statistical yearbooks</p> <p>Survey reports from Tacheng, Emin, Tuoli, and Yumin statistics bureaus</p>	<p><b>Assumptions</b> Central and provincial governments continue investments and support to Tacheng Prefecture and Baktu Port development</p> <p>The city and county master plans of Tacheng, Emin, Tuoli, and Yumin are implemented effectively</p> <p>Regional cooperation with the neighboring countries is maintained and strengthened</p> <p><b>Risk</b> Insufficient funds to support implementation of project cities and counties' master plans</p>
<p><b>Outcome</b> Enhanced delivery and efficiency of municipal services in the project border cities and counties</p>	<p><b>By 2020 (2014 baseline)</b> Annual probability of seasonal flooding reduced to 2% (baseline: 10%)</p> <p>Protected area increased by 17.0 km<sup>2</sup> in Tacheng City (baseline: 0 km<sup>2</sup>)</p> <p>Road fatality rate per 10,000 persons reduced to 5.00% from 5.07% (XUAR average in 2014) in project cities and counties</p> <p>20% of the MSW or 20 tons/day in Tacheng City are sorted and recycled for reuse (baseline: 5%)</p> <p>82% of residents in Tacheng City have access to district heating (baseline: 0%)</p> <p>91% of residents in Tacheng City are connected to sewerage network (baseline: 0%)</p>	<p>Independent professional verification of flood protection standards</p> <p>Tacheng, Emin, Tuoli, Yumin, and XUAR statistical yearbooks</p> <p>Survey reports from Tacheng, Emin, Tuoli, and Yumin statistics bureaus</p> <p>Project completion report</p> <p>PPMS report</p>	<p><b>Assumption</b> Government commitment and support for environmentally sustainable urban development</p> <p><b>Risk</b> Effective stakeholder participation and ownership are not developed</p>



Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p><b>Outputs</b></p> <p>1. Improved urban infrastructures and municipal services in Tacheng City</p>	<p><b>By 2020 (2014 baseline: 0)</b></p> <p>15.2 km of Kalanguer River rehabilitated and 37 ha of public and green spaces completed</p> <p>29.5 km of urban roads, 14.1 km of rehabilitated urban alleys put into use</p> <p>47.7 km of water supply piping network, 48.8 km of sanitary sewer piping network, and 40.6 km of primary hot water heating pipe network are operational</p> <p>Equipment and systems for MSW direct collection, sorting and disposal are operational</p> <p>Upgraded monitoring, cleaning, and MSW equipment in Baktu Land Port put into use</p> <p>Establishment of community-based waste-sorting groups in 20 selected communities (50% of participants are women)</p>	<p>Project completion and semiannual progress reports</p>	<p><b>Assumptions</b></p> <p>Project counterpart fund is appropriated timely</p> <p>The project is properly managed and monitored to ensure final implementation is completed in compliance with contract documents</p> <p><b>Risk</b></p> <p>Land acquisition approvals and implementation are delayed</p>
<p>2. Improved urban infrastructure and municipal services in Emin County</p>	<p>10.1 km of rehabilitated and newly constructed urban roads</p> <p>7.7 km of water supply piping network</p> <p>10 km sanitary sewer piping network are put into use</p>	<p>Project completion and progress reports</p>	
<p>3. Improved urban infrastructure and municipal services in Tuoli County</p>	<p>14.1 km-long newly constructed outer ring urban road and upgraded maintenance equipment are put into use</p> <p>30% of those employed in road maintenance are women</p>	<p>Project completion and progress reports</p>	
<p>4. Improved urban infrastructure and municipal services in Yumin County</p>	<p>9.7 km of newly constructed urban roads and upgraded maintenance and MSW equipment are put into use</p>	<p>Project completion and progress reports</p>	
<p>5. Improved and inclusive capacity development and project management</p>	<p>Training, with 30% of attendees women, conducted on (i) project management; (ii) public financial management for project cities; (iii) MSW management assessment, planning, and training; (iv) road safety and transport planning assessment and training; and (v) border trade and logistic development</p>	<p>Project completion and progress reports</p>	<p><b>Assumption</b></p> <p>Project financing is provided on time</p> <p><b>Risk</b></p> <p>Recruitment of the loan implementation consultant is delayed</p>

<b>Activities with Milestones</b>	<b>Inputs</b>
<p><b>1. Improved urban infrastructures and municipal services in Tacheng City</b></p> <p>1.1 Preliminary design by Q2 2015  1.2 Preparation of bidding documents by Q2 2015  1.3 Construction drawing by Q3 2015  1.4 Land acquisition and resettlement by Q3 2015  1.5 Road and associated facilities by Q3 2015  1.6 Upgrade of Baktu equipment by Q2 2016  1.7 Alley rehabilitation by Q4 2015  1.8 Rehabilitation of Kalanguer River by Q4 2015  1.9 Improvements to MSW handling by Q4 2016</p> <p><b>2. Improved urban infrastructures and municipal services in Emin County</b></p> <p>2.1 Preliminary design by Q2 2015  2.2 Preparation of bidding documents by Q2 2015  2.3 Construction drawings by Q2 2015  2.4 Land acquisition and resettlement by Q2 2015  2.5 Construction of roads by Q3 2015</p> <p><b>3. Improved urban infrastructures and municipal services in Tuoli County</b></p> <p>3.1 Preliminary design by Q2 2015  3.2 Preparation of bidding documents by Q2 2015  3.3 Construction drawings by Q2 2015  3.4 Land acquisition and resettlement by Q2 2015  3.5 Construction of roads by Q4 2015  3.6 Upgrade of maintenance equipment by Q4 2016</p> <p><b>4. Improved urban infrastructures and municipal services in Yumin County</b></p> <p>4.1 Preliminary design by Q2 2015  4.2 Preparation of bidding documents by Q2 2015  4.3 Construction drawings by Q2 2015  4.4 Land acquisition and resettlement by Q2 2015  4.5 Construction of roads by Q3 2015  4.6 Maintenance and MSW equipment by Q4 2016</p> <p><b>5. Improved and inclusive capacity development and project arrangement</b></p> <p>5.1 Recruitment and mobilization of consultants by Q3 2015  5.2 Establishment of a project management system for executing and implementing agencies, and project implementation units by Q3 2015  5.3 Establishment of PPMS for executing and implementing agencies by Q3 2015  5.4 Establishment of resettlement plan monitoring system by Q4 2015  5.5 Capacity building by Q2 2021  5.6 Implementation of EMP, GAP, EMDP, resettlement plans, and SDAP by Q2 2021  5.7 Monitoring of implementation of EMP, GAP, EMDP, resettlement plans, and SDAP until Q2 2021</p>	<p><b>Loan</b></p> <p>Asian Development Bank: \$150.0 million</p> <p><b>Counterpart funding</b></p> <p>Tacheng Municipal Government: \$112.73 million</p> <p>Emin County Government: 21.61 million</p> <p>Tuoli County Government: 10.65 million</p> <p>Yumin County Government: 7.88 million</p>

EMDP = ethnic minority development plan, EMP = environmental management plan, GAP = gender action plan, ha = hectare, km = kilometer, km<sup>2</sup> = square kilometer, MSW = municipal solid waste, PPMS = project performance management system, Q = quarter, SDAP = social development action plan, XUAR = Xinjiang Uygur Autonomous Region.

Source: Asian Development Bank.

### LIST OF LINKED DOCUMENTS

<http://adb.org/Documents/RRPs/?id=46063-002-3>

1. Loan Agreement
2. Project Agreement
3. Sector Assessment (Summary): Urban Development<sup>1</sup>
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Gender Action Plan
12. Initial Environmental Examination
13. Resettlement Plan: Tacheng City Infrastructures and Municipal Services Component
14. Resettlement Plan: Emin County Infrastructures and Municipal Services Component
15. Resettlement Plan: Tuoli County Infrastructures and Municipal Services Component
16. Resettlement Plan: Yumin County Infrastructures and Municipal Services Component
17. Indigenous Peoples Plan: Ethnic Minority Development Plan
18. Risk Assessment and Risk Management Plan

#### Supplementary Documents

19. Procurement Capacity Assessment
20. Regional Cooperation and Integration

---

<sup>1</sup> ADB. 2010. *People's Republic of China: Country Partnership Strategy (2011–2015)*. Manila. This covers the following sectors: Transport; Water and Other Urban Infrastructure and Services; and Agriculture, Natural Resources, and Rural Development.