



Report and Recommendation of the President to the Board of Directors

Project Number: 47923
November 2013

Proposed Loan China Water Affairs Group Limited and Shanghai Silver Dragon Investment Limited Urban–Rural Integration Water Distribution Project (People’s Republic of China)

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 September 2013)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.16
\$1.00	=	CNY6.12

Currency unit	–	Hong Kong dollar (HK\$)
HK\$1.00	=	\$0.13
\$1.00	=	HK\$7.76

ABBREVIATIONS

ADB	–	Asian Development Bank
CWA	–	China Water Affairs Group Limited
ESMS	–	environmental and social management system
mcm	–	million cubic meters
MOHURD	–	Ministry of Housing and Urban–Rural Development
NDRC	–	National Development and Reform Commission
NHFPC	–	National Health and Family Planning Commission
PRC	–	People’s Republic of China
SSD	–	Shanghai Silver Dragon Investment Limited

NOTES

- (i) The fiscal year (FY) of China Water Affairs Group Limited ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends, e.g. FY2013 ends on 31 March 2013.
- (ii) In this report, "\$" refers to US dollars.

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PROJECT AT A GLANCE

1. Project Name: Urban–Rural Integration Water Distribution Project		2. Project Number: 47923																				
3. Country: People's Republic of China		4. Department/Division: Private Sector Operations Department Infrastructure Finance Division 2																				
5. Sector Classification:																						
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Sectors	Primary	Subsectors																				
Water supply and other municipal infrastructure and services	✓	Water supply and sanitation																				
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Private sector development	✓	Private sector investment																				
Environmental sustainability		Urban environmental improvement																				
6a. Climate Change Impact:		6b. Gender Mainstreaming:																				
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7. Targeting Classification:		8. Location Impact:																				
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National																						
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9. Nonsovereign Operation Risk Rating : NSO 6 (Notional Group Rating)																						
10. Safeguard Categorization:																						
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Environment	B																					
Involuntary resettlement	B																					
Indigenous peoples	C																					
11. ADB Financing: Sovereign/Nonsovereign																						
	Modality	Source	Amount (\$ million)																			
Nonsovereign	A loan	OCR	Up to \$100 million in USD/CNY dual currency																			
Nonsovereign	complementary loan	Commercial lenders	Up to \$100 million in USD/CNY dual currency																			
12. Cofinancing:																						
	Financier	Category	Amount (\$ million)																			
	Local commercial lenders	Commercial Loan	Up to US\$140 million equivalent in local currency																			
Total			Up to US\$140 million equivalent in local currency																			
13. Counterpart Financing: Not Applicable																						
14. Aid Effectiveness: Not Applicable																						

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed US dollar–yuan loan facility of up to \$200 million equivalent to China Water Affairs Group Limited (CWA) and Shanghai Silver Dragon Investment Limited (SSD), comprising (i) a US dollar–yuan A-loan of up to \$100 million equivalent, and (ii) a US dollar–yuan complementary loan of up to \$100 million equivalent for the Urban–Rural Integration Water Distribution Project in the People’s Republic of China (PRC).

II. THE PROJECT

A. Project Identification and Description

1. Project Identification

2. Access to safe and reliable water is a basic human need that remains unmet for hundreds of millions in the PRC: half of the population (700 million) consume water below World Health Organization standards. Furthermore, a demographic imbalance in water access and quality is evident: about 55% of rural residents lack household tap connections, relying instead on wells and other communal means for supply.¹ In those communities, water is often supplied below national quality standards, a consequence of inadequate treatment or secondary contamination from pipelines with high leakage during distribution.

3. Against this backdrop, CWA, a private sector pioneer in urban water distribution, is expanding its strategy to target underserved rural and semi-urban communities. CWA is well established in its core business of supplying water to cities. Since 2011, with Asian Development Bank (ADB) assistance, the firm has implemented the Municipal Water Distribution Infrastructure Development Project, which supports the rehabilitation and expansion of water distribution networks in second- and third-tier cities.² To date, the assistance has funded 11 subprojects with aggregate supply capacity of 1.2 million cubic meters (mcm) per day. Building on the success of this earlier ADB intervention, CWA requested ADB to consider a follow-on project to finance investments that would reach communities surrounding its existing service areas. CWA also requested ADB’s support for expansion into second- and third-tier cities to establish new operations and hubs from which to penetrate surrounding rural areas over time.

4. Despite good progress in expanding water access to its urban residents, the PRC faces a rural water gap. The challenge is particularly acute for the PRC’s 650 million rural residents—of whom more than half lack basic household connections and who bear disproportionately the impact on health and livelihood from scarce, expensive, or substandard water (footnote 1). Efforts to establish last-mile connections confront high investment costs, especially in areas with lower population density. Even in rural or semi-urban communities which do have tap connections, water is often supplied below national quality standards, caused by pollution at the water source, inadequate treatment, or contamination from pipelines. Finally, waste and

¹ United Nations Children’s Fund (UNICEF) and World Health Organization. 2012. *Progress on Drinking Water and Sanitation (2012 Update)*. New York.

² ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan for Municipal Water Distribution Infrastructure Development Project in the People’s Republic of China*. Manila.

inefficiency are higher in rural and semi-urban areas than in any other part of the water chain, with nonrevenue water rates typically above the PRC's national average of 20%–30%.³

5. Closing the rural water gap is an increasing priority for the government. In 2012, it announced a program of rural water investments of CNY170 billion during the 12th Five-Year Plan (2011–2015)—or CNY100 billion more than was allocated in 2006–2010.⁴ The program would prioritize the construction and rehabilitation of piped water systems in rural and semi-urban areas, including the extension of urban water supply networks. The program is part of the government's urban–rural integration initiative aimed to rectify development imbalances between city and countryside through provision of basic infrastructure services.

6. Water distribution in the PRC has traditionally been the responsibility of municipal government. Utilities owned by municipalities typically suffer from chronic financial distress due to weak management, poor budgetary discipline, artificially low water tariffs, and the widespread problem of nonrevenue water. Meanwhile, utility financial losses are a burden on many local government budgets, and contribute to patterns of underinvestment in tap networks. In response, the central government has since 1998 progressively encouraged commercialization of water distribution and increased private sector participation as a means to increase investment and efficiency.⁵

2. Project Design

7. ADB's assistance would finance CWA's plan to invest in (i) expanding existing water utility networks into adjacent semi-urban and rural communities; and (ii) establishing, through construction or acquisition, new water treatment and distribution hubs in second- and third-tier cities that have the potential for urban–rural integration. ADB will extend financing on a subproject-by-subproject basis, subject to a set of defined environmental, social, development, and financial criteria.

8. The project is designed to be cost-effective in financing smaller-scale water supply projects. The portfolio approach will enable ADB to support multiple water supply projects of a scale usually too small and expensive for ADB or international banks to finance on a stand-alone basis.

9. The project differs from ADB's earlier assistance to CWA by more strongly emphasizing inclusiveness. By leveraging the company's existing water supply projects (as bases from which to expand), the project can target rural and semi-urban communities, typically of lower incomes,

³ "Nonrevenue water" refers to water that is economically lost due to leaking pipelines, inadequate control equipment or meters (either faulty or never installed), or lack of payment collection.

⁴ The investment program is an interministerial effort of the National Development and Reform Commission (NDRC), the Ministry of Water Resources, the National Health and Family Planning Commission, and the Ministry of Environmental Protection (MEP). Supporting policy guidance is also given by the Ministry of Housing and Urban–Rural Development (MOHURD) and NDRC. 2012. *National Plan on the Modification of Urban Water Supply Facilities: Infrastructure Development in the 12th Five-Year Plan and 2020 Targets*. Beijing.

⁵ Relevant regulations include: NDRC and MOHURD. 1998. *Administrative Measures on Tariffs for Town Water Supply*. Beijing. 23 September 1998, amended 29 November 2004; NDRC, Ministry of Finance, MOHURD, Ministry of Water Resources, and Ministry of Environmental Protection. 2002. *Further Improvement of Municipal Water Supply Tariffs Scheme*. Beijing; NDRC and MOHURD. 2009. *Notice Regarding the Improvement of Administrative Work on Municipal Water Tariffs*. Beijing; State Council. 2011. *Circular 1: Regarding the Decision to Accelerate Water Reform and Development*. Beijing; MOHURD. 2012. *Opinions on the Implementation of Further Encouragements and Guidance to Private Sector Capital for Entering the Public Utility Sector*. Beijing.

where water supply infrastructure is underdeveloped.⁶ Consumers in these areas—both those who receive new tap connections in their homes⁷ and those already connected to small-scale stand-alone pipeline networks—will benefit from better water quality, more reliable access, and lower water tariffs.⁸

3. The Sponsor and the Borrowers

10. The project will have two borrowers: (i) CWA, the sponsor and borrower representative, will be borrower for US dollar and offshore yuan tranches; and (ii) SSD will be an onshore yuan borrower.

11. CWA is a rapidly emerging player in the PRC water supply industry. Since its founding in 2003, the company has pioneered a successful model of acquiring municipal utilities (either in partnership with local governments or through full privatization), overhauling infrastructure and management systems, and efficiently distributing water to households and industries. With a strategic focus on smaller cities and towns in interior provinces, CWA operates nearly 30 concessions with total treatment and distribution capacity of about 4.5 mcm of water per day. About 85% of CWA's revenues come from water supply, with the remainder from sewage treatment, water-related construction services, and other ancillary businesses. CWA is incorporated in Bermuda and listed on the Hong Kong Stock Exchange.⁹ For the year to 30 March 2013, the company reported consolidated revenues of HK\$2.25 billion; earnings before interest, tax, depreciation, and amortization of HK\$703 million; and total assets of HK\$11.6 billion. Its performance under 2 years of ADB assistance has been in line with expectations at the time of Board approval, with stable growth, strong management, and financial ratios well within the covenants of the ADB loan agreement.¹⁰

12. SSD is an investment holding company wholly owned by CWA for investments in water-related businesses. Among SSD's operating subsidiaries are five water distribution companies and several ancillary businesses.

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⁶ CWA's rural and semi-urban investments would target areas under the administrative jurisdiction of adjacent municipalities, and thus would be subject to the PRC's standard regulations for municipal water supply.

⁷ Under the project, costs of connecting new household taps will be borne by a combination of user fees, cross-subsidization (across user groups and between urban center and rural periphery), and local government assistance through grants and subsidized lifeline tariffs.

⁸ Integration of smaller stand-alone networks into larger utility systems typically increases economies of scale. Due diligence confirmed that, in most locations, newly integrated rural customers will see decreases in water tariffs. Further, for consumers without pre-existing tap connections, tap supply is significantly cheaper than bottled water.

⁹ Bermuda is on the list of jurisdictions that have substantially implemented the internationally agreed tax standard. The Global Forum on Transparency and Exchange of Information for Tax Purposes has determined, following its phase 1 peer review of Bermuda, that the country has in place all the elements assessed to date in relation to the internationally agreed tax standard. (September 2013. *OECD Progress Report to the G20 Leaders: Global Forum Update on Effectiveness and On-going Monitoring*. Paris). Following ADB's review of CWA, ADB does not believe that CWA has been established or is being used, for cross-border tax evasion, money laundering, or the financing of terrorism.

¹⁰ FY2013 consolidated revenues projected in the report and recommendation of the President were HK\$2.7 billion (versus actual revenues of HK\$2.3 billion); projected net income was HK\$0.95 billion (vs. HK\$0.9 billion); and projected assets were HK\$11.5 billion (vs. HK\$11.6 billion). The company is significantly less indebted (HK\$2.5 billion) than was forecast (HK\$4.1 billion).

B. Development Impact, Outcome, and Outputs

13. **Impact.** The anticipated project impacts will be (i) expanded access to safe and reliable water supply for rural and urban households and other customers in the PRC; (ii) improved water efficiency; and (iii) increased private sector participation in rural and urban network investment and operation.

14. **Outcome.** The outcome will be improved water services in rural, semi-urban, and small-town areas of the PRC provided through private sector participation, as measured by improved or new water connections for rural and urban residents, demand for local goods and services, and contribution to PRC government revenue, improvements in water efficiency, and achievement of national water quality standards. About 0.7 million households will be given reliable and convenient access to safe drinking water through the ADB-financed subprojects. The beneficiaries include the poor, who disproportionately bear the health and livelihood costs associated with substandard or insufficient water supply.

15. **Output.** The output will be the rehabilitation and operation of water treatment plants and distribution at designed performance levels of up to 2 mcm per day of water supply capacity. The facilities will comply with national standards for safe drinking water quality and with ADB safeguards, and technical and financial eligibility criteria.¹¹

C. Alignment with ADB Strategy and Operations

16. **Consistency with Strategy 2020.** The project is consistent with Strategy 2020, which emphasizes support for achieving poverty reduction through inclusive and environmentally sustainable growth, including private sector development as a driver of change.¹² The strategy lists infrastructure and the environment as two of the five core areas in which ADB will employ its financial and institutional resources to maximize results, efficiency, and impact. In terms of infrastructure, the project is in line with Strategy 2020's emphasis on public–private partnerships and private sector engagement; and consistent with plans to improve human health through interventions in water supply, sanitation, and waste management. With regard to the environment, ADB will assist developing member countries and their municipalities in managing a range of problems resulting from rapid urbanization.

17. **Consistency with country strategy.** ADB's country partnership strategy for the PRC is based on three development pillars: (i) inclusive growth and balanced development, (ii) resource efficiency and environmental sustainability, and (iii) regional cooperation and public goods.¹³ The project reinforces each pillar and will be an integral part of ADB's overall support for rural–urban development in the PRC. It strongly complements current ADB initiatives in the water sector.¹⁴ It is also consistent with the strategy's support for private sector development as a driver of change.

¹¹ The quality of treatment plant output is tested by CWA, and enforced through regular inspections by MEP, MOHURD, and the National Health and Family Planning Commission (NHFPC). The water quality in households is tested by MOHURD and NHFPC on a spot basis.

¹² ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

¹³ ADB. 2008. *Country Partnership Strategy: People's Republic of China, 2011–2015*. Manila.

¹⁴ ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Kunming Qingshuihai Water Supply Project*. Manila; ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Jilin Water Supply and Sewerage Development Project*. Manila; ADB. 2003. *Report and Recommendation of*

18. **Consistency with water policy and operational plan.** The project is consistent with ADB's Water Policy, which emphasizes integrated water management, water conservation, and system efficiencies.¹⁵ The Water Operational Plan, 2011–2020 also lists improved efficiency and private sector participation as priority areas.¹⁶ The project is an example of the type of intervention envisaged by the plan, which promotes water as a core investment area and raises ADB's water investment target to \$2.0 billion–\$2.5 billion annually, or a total of \$20 billion–\$25 billion by 2020.

D. Project Cost and Financing Plan

19. CWA's business plan for FY2014–FY2017 indicates a total investment requirement of \$400 million equivalent and includes civil works, equipment and materials, other local procurement, and working capital.

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E. Implementation Arrangements

20. Table 2 summarizes the implementation arrangements.¹⁷

Table 2: Summary of Implementation Arrangements

Aspects	Arrangements
Concession framework	Concessions granted by municipal governments will include surrounding semi-urban and rural areas. ^a Concession rights are awarded through public tendering or bilateral negotiation with underlying competitive selection. For all subprojects, a feasibility study, environmental assessment, resettlement plan, and project design will be prepared by CWA, reviewed by ADB, and approved by municipal governments. Each subproject will be implemented in accordance with granted approvals, and during construction and operation will be subject to government inspections on various aspects, including environment, health and safety, land acquisition and resettlement, impacts on ethnic minorities, labor, and sanitation.
Tariff framework	Tariffs are governed by PRC cost-plus regulations and administered by municipal pricing authorities with public consultation. ^b
Management	CWA will centrally control all subproject development and financing arrangements. Procurement (e.g., third-party construction contracts through competitive selection) of all civil works and equipment will be handled by CWA according to PRC local bidding procedures.
Subproject selection	To be eligible for ADB funding, subprojects must meet defined criteria for location, investment purpose, environmental and social risk mitigation, water efficiency improvement, and forecast financial return.
Implementation period	2014–2017
Operation arrangements	
Operation and maintenance	CWA will manage project implementation, operation, and maintenance as part of its 25–30-year subproject concession obligations.

the President to the Board of Directors: Proposed Loan to the People's Republic of China for the Harbin Water Supply Project. Manila; ADB. 2009. *Urban Innovations and Best Practices: Understanding Urban Water Tariff in the People's Republic of China.* Manila.

¹⁵ ADB. 2001. *Water for All.* Manila.

¹⁶ ADB. 2011. *Water Operational Plan, 2011–2020.* Manila.

¹⁷ Details of Implementation Arrangements (accessible from the list of linked documents in Appendix 2).

Performance monitoring	CWA will submit to ADB key performance indicators, including audited financial statements, environmental and social monitoring reports, and development effectiveness indicators.
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ADB = Asian Development Bank; CWA = China Water Affairs Group Limited; PRC = People's Republic of China.

^a Each subproject to link surrounding rural areas will be structured as an extension of an existing concession agreement with a municipal government. This contractual arrangement is in line with the PRC's urban-rural integration policies, which require the municipality to be also in charge of surrounding villages and communities.

^b End-use tariffs are set by each municipal government on a cost-plus basis to target a benchmark return on equity of 8%–12% in accordance with national regulations (Ministry of Housing and Urban-Rural Development; National Development and Reform Commission. 1998. *Administrative Measures on Tariffs for Town Water Supply*. Beijing. 23 September 1998, amended 29 November 2004). If operating costs from electricity, labor, upgrades, maintenance, or other inputs rise, a utility operator is entitled to apply for a corresponding tariff increase to meet the benchmark return.

Source: Asian Development Bank.

F. Projected Financial and Economic Performance

21. The project is financially viable as CWA's expected financial internal rate of return is higher than the weighted average cost of capital, and economically viable as the economic return on invested capital is higher than the social discount rate of 12%.

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III. THE PROPOSED ADB ASSISTANCE

A. The Assistance

22. ADB's proposed assistance consists of (i) a US dollar-yuan A-loan of up to \$100 million equivalent, and (ii) a US dollar-yuan complementary loan of up to \$100 million equivalent funded by participating banks with ADB acting as lender of record. The proposed A-loan will have a maturity of up to 10 years from the date of the first disbursement, including a 4-year grace period on principal repayment. The complementary loan will have a maturity equal to or shorter than that of the A-loan.

B. Value Added by ADB Assistance

23. **Catalyzing private investment in less-developed areas.** Water distribution infrastructure requires significant upfront capital, with a particular need for loans under tenors appropriate for long-lived assets. In the water distribution business—especially in smaller urban or rural areas—such financing is difficult to obtain from commercial banks because of risk concerns and bank inexperience in the sector. The project will help a proven player surmount these obstacles, while expanding private investment in less-developed areas where broader participation is urgently required.

24. **Developing viable commercial models of water provision.** The project builds on the success of ADB's earlier assistance to CWA, which focused on urban centers, by supporting the company in the relatively untested area of rural utility service provision. Through a portfolio financing approach, ADB will support the development of multiple water supply subprojects that are typically too small and expensive for ADB or international banks to finance on a stand-alone basis. Finally, ADB's experience with the project can contribute meaningfully to the dialogue on rural-urban integration and water sector development in the PRC and the rest of Asia and the Pacific.

C. Risks

25. **Tariff risk.** Any failure to secure adequate tariff increases would impact the financial viability of the subprojects' operation. Mitigation measures include (i) PRC policies, developed under long-standing ADB technical assistance, to mandate that urban water tariffs provide cost recovery and adequate returns; (ii) strong government policy pressure to raise tariffs to rationalize water use and prevent waste; (iii) the relatively low starting point of current urban water tariffs, which gives significant room to raise tariffs within affordability thresholds; and (iv) CWA consideration of local government tariff plans in its selection and negotiation of subproject investments.

26. **Risk of nonpayment.** Possible nonpayment by end users—residential, commercial, or industrial—would directly affect cash flow. This risk is mitigated by (i) the installation of meters (one per customer) in line with national policy and CWA's business strategy; (ii) the legal right of PRC water utilities to deny service for nonpaying customers; and (iii) the reliance of city governments on ancillary fees collected from water customers by the subproject companies, thereby aligning local authorities with CWA in pursuing prompt collections. Due to these factors, CWA reports tariff collection rates of over 98%.

27. **Demand risk.** Revenue risk may arise from unexpectedly low demand for water services, affecting either CWA's distribution operations or related investments in treatment plants. This risk is mitigated by (i) the large latent demand for water among rural and urban residential, commercial, and industrial customers; and (ii) CWA's practice of selecting its subprojects in part based on demand potential.

28. **Water supply risk.** Water supply risk may arise from contamination, depletion, or drought. This risk is mitigated by (i) CWA's practice of selecting subprojects with proven water availability and quality, with a focus on water-rich central and southern provinces; (ii) water supply agreements with provincial or municipal governments, which will give the subproject companies the legal right to predetermined volumes of water at specified quality and enables the subproject company (subject to certain conditions being fulfilled) to terminate the agreements in case of significant deterioration in water quality; and (iii) standardized sales agreements with industrial and commercial end users, which will include provisions freeing the subproject companies from liability or obligation when upstream water supply is suspended by circumstances beyond their control.

29. **Expansion.** The project will support CWA's plans to operate up to 6.5 mcm per day of additional water supply capacity, a significant expansion on its current operational capacity of 4.5 mcm per day. Such expansion requires strong management skills to overcome execution risk and the expected increase in CWA's gearing. Mitigating measures include CWA's overall technical competence, its use of standardized management systems across its subproject companies, its use of shared technical resources at several operational hubs, and the brownfield (i.e., already operating) nature of the subprojects. Further, ADB's assistance is conditional on the subprojects meeting eligibility criteria and financial covenants, helping ensure subproject viability.

30. **Acquisition valuation.** Subproject acquisitions involve valuation of local utility companies. With its successful track record, CWA has established a methodology to effectively value the pipeline networks, related infrastructure, and land owned by the local utility companies. To verify its assessments, CWA uses independent valuations from third-party

auditors. Further, PRC policies mandate that water tariffs provide cost recovery and adequate returns taking into account the value of utility assets.

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IV. POLICY COMPLIANCE

A. Safeguards and Social Dimensions

31. **Safeguards.** The project is being processed as corporate finance, with ADB funds to be allocated for implementing specific subprojects. In line with ADB's Safeguard Policy Statement (2009) requirements for corporate finance projects, safeguard requirements 1–3 will apply, and an environmental and social management system (ESMS) will be maintained.¹⁸ The project is classified as category B for impacts on the environment and involuntary resettlement and category C for indigenous peoples. The environmental impacts are not significant and are mostly construction-related; they can be mitigated through the adoption of good engineering practices. Resettlement impacts are not expected to be significant as (i) rehabilitation of water treatment plants and distribution networks will be within the existing facilities or within the available road reserves; (ii) for new facilities, the municipal governments normally complete land acquisition, resettlement, and rehabilitation (if needed) prior to handing over the sites to CWA; and (iii) expansion of distribution networks in unserved areas will be within the available road reserves. Impacts on indigenous peoples are not anticipated as the plants are typically located in areas where the population is primarily Han. The potential environmental and social impacts of the project have been defined in the ESMS and effective measures to avoid, minimize, mitigate, and compensate for the adverse impacts of every subproject financed under the project will be incorporated in the initial environmental examination and resettlement plan for each subproject.

32. A corporate audit was conducted on CWA's ESMS and its past and current performance against the objectives, principles, and requirements of the Safeguard Policy Statement. The audit confirmed that (i) CWA's ESMS has been developed to comply with the objectives, principles, and requirements of the Safeguard Policy Statement; (ii) no substantive revisions are required to the existing ESMS to mitigate impacts resulting from the proposed project; and, (iii) there are no existing or legacy issues relating to the audited facilities. The audit highlighted the need for a more stringent application of the ESMS provisions in the audited facilities, especially in documentation and reporting of the implementation of environmental and social management measures. In line with the findings of the audit and the corrective action plan, CWA commits to revise and update its corporate ESMS prior to the first ADB disbursement. Subprojects where land was acquired prior to handing over the concession to CWA and subprojects with operational facilities will be subject to audit following the updated ESMS.¹⁹

33. **Other social dimensions.** The project is classified as having some gender elements. In addition to the direct benefit of improving households' access to potable water, especially women's, CWA will work toward incorporating the following measures: (i) carry out meaningful consultations that are gender inclusive and responsive, (ii) involve women in awareness

¹⁸ CWA, as part of the ongoing Municipal Water Distribution Infrastructure Development Project, established in 2011 its ESMS to screen, assess, and mitigate environmental and social impacts (footnote 2).

¹⁹ Findings of the Corporate Safeguards Audit and Environmental and Social Management System Arrangement (accessible from the list of linked documents in Appendix 2).

generation activities, training programs on water conservation, and water user awareness campaigns, and (iii) prioritize hiring of women for jobs created. CWA will employ local residents during construction and operation of the facilities. CWA and its contractors will comply with the national labor laws and take measures to comply with the international core labor standards in accordance with ADB's Social Protection Strategy.²⁰

B. Anticorruption Policy

34. CWA and SSD were advised of ADB's policy of implementing best international practice relating to combating corruption, money laundering, and the financing of terrorism. ADB will ensure that the investment documentation includes appropriate provisions prohibiting corruption, money laundering, and the financing of terrorism, and remedies for ADB in the event of noncompliance.

C. Investment Limitations

35. The proposed direct loan is within the medium-term, country, industry, group, and single-project exposure limits for nonsovereign investments.

D. Assurances

36. Consistent with the Agreement Establishing the Asian Development Bank,²¹ the Government of the People's Republic of China's no objection to the proposed assistance to CWA and SSD will be obtained. ADB will enter into suitable finance documentation, in form and substance satisfactory to ADB, following approval of the proposed assistance by the Board of Directors.

V. RECOMMENDATION

37. I am satisfied that the proposed loan facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the US dollar–yuan loan facility of up to \$200,000,000 equivalent to China Water Affairs Group Limited and Shanghai Silver Dragon Investment Limited for the Urban–Rural Integration Water Distribution Project in the People's Republic of China, comprising

- (i) a US dollar–yuan A-loan of up to \$100,000,000 equivalent from ADB's ordinary capital resources; and
- (ii) a US dollar–yuan complementary loan of up to \$100,000,000 equivalent to be funded by participating banks,

with such terms and conditions as are substantially in accordance with those set forth in this report, and as may be reported to the Board.

Takehiko Nakao
President

11 November 2013

²⁰ ADB. 2003. *Social Protection*. Manila (adopted in 2011).

²¹ ADB. 1966. *Agreement Establishing the Asian Development Bank*. Manila.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impacts</p> <p>Expanded access to safe and reliable water supply for rural and urban households and other customers in the PRC</p> <p>Improved water efficiency in the PRC</p> <p>Increased private sector participation in rural and urban water networks</p>	<p>Achieve water supply coverage rate^a of 98% in major cities, 88% in county-level towns, and 78% in smaller towns in the PRC by 2020,^b from 89.5% in major cities, 78.8% in county-level towns, and 62.0% in smaller towns in 2010^c</p> <p>85% of cities meet national standard for pipeline leakage rate of 12% by 2020,^d from less than 50% of cities in 2010^c</p> <p>Share of privately owned or operated water distribution projects increases from 10% in 2010 to reach 20% by 2020^e</p>	<p>Five-Year Plan for Urban Water Supply Facilities from MOHURD and NDRC</p> <p>Five-Year Plan for Urban Water Supply Facilities from MOHURD and NDRC</p> <p>Industry reports and equity research reports</p>	<p>Assumptions</p> <p>The government upholds its commitment to water sector management, resource conservation, and environmental protection.</p> <p>Policies to encourage rural–urban integration remain in place.</p> <p>Risks</p> <p>Private developers are unable to secure financing for expansion.</p>
<p>Outcome</p> <p>Improved water services in second- and third-tier cities, and surrounding semi-urban and rural areas</p>	<p>At least 740,000 households are connected to improved piped potable water from 2014 to 2018^f</p> <p>An average of CNY600 million of local goods and services procured per annum from 2018 onwards</p> <p>An average CNY140 million per annum paid in taxes to municipal governments from 2018</p> <p>At least a 5% decline in nonrevenue water in acquired networks from pre-acquisition condition between 2014 and 2018</p> <p>All water treatment plants funded by ADB meet the national standards for</p>	<p>Project monitoring and development effectiveness monitoring reports</p> <p>Audited financial statements and annual reports</p> <p>Audited financial statements and annual reports</p> <p>Project monitoring reports</p> <p>National Standards for Drinking-Water Quality (GB5749-2006)</p>	<p>Assumptions</p> <p>Municipal governments honor the concession agreements.</p> <p>Municipal governments upgrade water distribution networks to ensure better quality of water consumed.</p> <p>Risks</p> <p>Project schedule slips due to approval delays.</p> <p>Only a few municipal governments have adequate facilities to test all 106 indicators of the national standards for drinking-water quality.</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	drinking-water quality by 2018 ^g		
Outputs Rehabilitation and operation of water treatment plants and distribution	At least 10 subprojects of a combined capacity of 2 million cubic meters per day rehabilitated, expanded, or newly constructed in rural areas and second- and third-tier cities from 2014 to 2017 ^h Additional 500 local workers employed during construction from 2014 to 2017 Goods and services purchased locally amount to CNY3 million per annum from 2014 to 2017 Revision and update of current environmental and social management system, including staff recruitment and capacity building plans, implemented before the first disbursement	Project monitoring and development effectiveness monitoring reports Project monitoring and development effectiveness monitoring reports Audited financial statements and annual reports Annual environmental and social monitoring reports	Assumptions Project sponsor maintains technical and operating capacity to complete projects and implement services. Risks Delay by municipalities in granting concession rights to private sector due to unforeseen regulation changes Raw water supply is constrained or contaminated
Activities with Milestones 1. Signing of loan agreements by Q4 2013 2. Financial closure by Q1 2014 3. Clearance of all loan drawdown conditions by Q2 2014 4. Fully disbursed loans by Q4 2017		Inputs A-loan of up to \$100 million equivalent in US dollar–yuan loan Complementary loan of up to \$100 million equivalent in US dollar–yuan loan	

ADB = Asian Development Bank, MOHURD = Ministry of Housing and Urban–Rural Development, NDRC = National Development and Reform Commission, PRC = People’s Republic of China, Q = quarter.

^a Including household access and communal access.

^b The 12th Five-Year Plan for Urban Water Supply Facilities targets water supply coverage rate of 95% in cities, 85% in counties, and 75% in towns in the PRC by 2015.

^c MOHURD and NDRC. 2012. *The 12th Five-Year Plan for Urban Water Supply Facilities*. Beijing.

^d The 12th Five-Year Plan for Urban Water Supply Facilities targets 80% of cities to meet national standard for pipeline leakage rate of 12% by 2015.

^e ADB estimate.

^f Based on production capacity of 2 million cubic meters per day, nonrevenue water of 23%–25% per subproject, and household consumption of 166 cubic meters per year.

^g The PRC’s national standards for drinking-water quality were announced in 2006 (GB5749-2006), with increases in stringency to 2015. The water-testing facilities of China Water Affairs Group Limited (CWA) will be tested against the 2015 standards level, and used to generate reports on national water quality standards met or exceeded.

^h CWA will record the capacity of rehabilitated, expanded, and newly constructed network pipes.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=47923-01-4>

1. Sector Overview
2. Details of Implementation Arrangements
3. Contribution to the ADB Results Framework
4. Financial Analysis
5. Economic Analysis
6. Country Economic Indicators
7. Summary Poverty Reduction and Social Strategy
8. Safeguards and Social Dimensions Summary
9. Findings of the Corporate Safeguards Audit and Environmental and Social Management System Arrangements

Supplementary Documents

10. Financial Projections